PB83-126821

Regulations and Non-Regulatory Revisions to State Implementation Plan: Colorado

Atlantic Environmental Associates, Inc.
Waltham, MA

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

Oct 81

U.S. Department of Commerce
National Technical Information Service
NTIS

EPA-450/2-81-025

Regulations and Non-Regulatory Revisions to State Implementation Plan: Colorado

By

Atlantic Environmental Associates, Inc.
59 Vernon Street
Waltham, MA 02154

Contract No. 68-02-3565

EPA Project Officer: Willis P. Beal

Prepared for

U.S ENVIRONMENTAL PROTECTION AGENCY
Control Programs Development Division
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

July 1981

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO.
EPA-450/2-81-025

2.

3. RECIPIENT'S ACCESSION NO.
PB83 126821

4. TITLE AND SUBTITLE
Regulations and Non-Regulatory Revisions to State Implementation Plan: Colorado

5. REPORT DATE
October, 1981

6. PERFORMING ORGANIZATION CODE

7. AUTHOR(S)

8. PERFORMING ORGANIZATION REPORT NO.

9. PERFORMING ORGANIZATION NAME AND ADDRESS
Atlantic Environmental Associates, Inc.
59 Vernon Street
Waltham, MA 02154

10. PROGRAM ELEMENT NO.

11. CONTRACT/GRANT NO.
68-02-3565

12. SPONSORING AGENCY NAME AND ADDRESS
Control Programs Development Division
Office of Air Quality Planning and Standards
Research Triangle Park, NC 27711

13. TYPE OF REPORT AND PERIOD COVERED

14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES
EPA Project Officer: Willis P. Beal

16. ABSTRACT

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA-approved State and/or local air pollution control regulations cited by reference in the Federal Register; regulations promulgated as of August 1, 1981 have been included in this document.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979. State and/or local air quality regulations which have not been Federally approved as of August 1, 1981, are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations. A summary sheet of the regulatory revisions is provided to give a quick historical assessment of the changes.

The second part of the document contains the text of non-regulatory SIP revisions approved by EPA up to August 1, 1981, excluding notices or certifications of public hearings and technical support data. A complete tabulation of these revisions is also provided.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Pollution State Regulations State Implementation Plans		

18. DISTRIBUTION STATEMENT
Release Unlimited

19. SECURITY CLASS *(This Report)*
Unclassified

20. SECURITY CLASS *(This page)*
Unclassified

21. NO. OF PAGES
151

22. PRICE

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

This report has been reviewed by the Control Programs Development Division of the Office of Air Quality Planning and Standards, EPA, and approved for publication. Mention of trade names or commercial products is not intended to constitute endorsement or recommendation for use. Copies of the entire document are available for inspection and copying at EPA Headquarters (401 M Street SW, Washington, DC 20460), EPA's Office of Air Quality Planning and Standards (Room 826, 411 West Chapel Hill Street, Durham, NC 27701), and the appropriate EPA Regional Offices. Documents containing only the regulatory portions of each State Implementation Plan may be ordered for a nominal fee from the National Technical Information Services, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

PREFACE

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA approved State and/or local air pollution control regulations cited by reference in the Federal Register; all regulations Federally promulgated as of August 1, 1981 have been included.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979.* State and/or local air quality regulations which have not been Federally approved as of August 1, 1981 are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State or local agencies to enforce such regulations.

This document is not intended to provide a tool for determining the enforceability of any given regulation. Rather, it is intended to provide a comprehensive compilation of those regulations which are incorporated by reference into Title 40, Part 52, of the Code of Federal Regulations (CFR). The exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation in this document does not, in itself, render the regulation enforceable by either the State or EPA.

The regulations have been organized in this document according to the official State/local agency format. However, since State air quality regulations vary widely in their organization, content, and language, a standardized subject index has been added. The index listings consist of both pollutant and activity oriented categories to facilitate usage. For example, regulations which apply to copper smelters may be found under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State are not included herein but can be found under Title 40 Code of Federal Regulations, Part 52.

Additionally, a summary sheet of the regulatory revisions is included to provide a quick historical assessment of the changes. These summary sheets contain the date of submittal to EPA of each revision and the Federal Register publication date on which the revision was approved by EPA. A brief description of the regulation which was submitted is also included.

In accordance with the Act, the second part of the document contains non-regulatory SIP revisions approved by EPA up to August 1, 1981. All approved non-regulatory revisions listed under Identification of Plan in the CFR are included except notices or certifications of public hearings, and technical support data. Non-regulatory submittals which have only received EPA approval on selected elements are included in their entirety with an accompanying indication of the status of Federal actions on the non-approved elements. The non-regulatory revisions have been organized in this document according to the date of publication of EPA approval in the Federal Register. For historical completeness, a complete tabulation of these revisions is provided at the beginning of this second section.

---

* Regulations and Non-Regulatory Revisions to State Implementation Plan: Colorado, EPA-450/2-80-012, prepared under Contract 68-02-3388, July 31, 1980.

SUMMARY OF
EPA-APPROVED REGULATORY REVISIONS TO STATE OF COLORADO SIP
BETWEEN JULY 1, 1979 AND JULY 31, 1981

Publication of Approval	Submittal Date	Page	Document Description
10/05/79 and 02/05/80	01/02/79	44FR57410 45FR7802	Revision to and adoption of Regulations 1, 7, 9. 11. (Note: Sulfur Dioxide Regulations not approved.)
03/13/81	06/05/80	46FR16687	Repeal and repromulgation of regulation No. 7, "A Regulation to Control Emissions of Volatile Organic Compounds" and revisions to the Common Provisions Regulations as they relate to Regulation No. 7.
03/19/81	08/25/80	46FR17549	Revision to SIP for Coors Container Corporation in regard to alternative VOC emissions reduction for its printing presses. Revises Section VII B, 2c of old Regulation 7 (01/02/79), which pertains to Section II 0 1b of new Regulation 7 (06/05/80)
04/30/81	06/22/80	46FR24182	Repeal and repromulgation of Regulation No. 3 and revisions to common provisions regulation as they relate to changes in Register No. 3 (several parts disapproved).

TABLE OF CONTENTS

STATE REGULATIONS

Revised Standard Subject Index	Section Number	Title	Page Number
(2.0)		Applicability	1
(15.0)		Authority	1
(2.0)		State of Colorado Air Pollution Control Act (1970) Legislative Declaration (66-31-2)	1
(2.0)		Intent	2
		Growth	3
		Abbreviations	3
(1.0)	I	Definitions	5
(2.0)	II	General	27
(50.1.2)	Reg 1, Sec I	Smoke Emissions & Opacity Regulations	32
(50.1)	Reg 1, Sec II	Particulate Emission Regulations	40
(50.2)	Reg 1, Sec III	Emissions Standards for Existing Iron and Steel Plant Operations	49
(2.0)	Reg 3, Sec I	Applicability	61
(2.0)	Sec II	Air Pollutant Emission Notice Requirements	61
(3.0)	Sec III	General Requirements For Emission Permits	64
(3.0)	Sec IV	Emission Permit Review Procedures	64
(3.0)	Sec V	Banking of Emission Reductions	80
(3.0)	Sec VI	Fees	81

Revised Standard Subject Index	Section Number		Page Number
(3.0)	Sec VII	Confidential Information or Data Contained in Apen's or Emission Permit Application	83
(2.0)	Reg 7, Sec I	Applicability	84
(2.0)	Sec II	General Provisions	84
(50.4)	Sec III	General Requirements for Storage and Transfer of VOC's	87
(50.4)	Sec IV	Storage of Highly VOC's	88
(50.4)	Sec V	Disposal of VOC's	88
(51.16)	Sec VI	Storage and Transfer of Petroleum Distillate	88
(51.16)	Sec VII	Crude Oil	94
(51.15)	Sec VIII	Petroleum Processing and Refining	94
(51.22)	Sec IX	Surface Coating Operations	96
(51.24)	Sec X	Use of Solvents for Degreasing and Cleaning	105
(51.23)	Sec XI	Use of Cutback Asphalt	112
(51.21)	Appendix A	Criteria for Control of Vapors from Gasoline Transfer to Storage Tanks	115
(51.21)	Appendiz B	Criteria for Control of Vapors from Gasoline Transfer at Bulk Plants (Vapor Balance System)	117
(51.21)	Appendix C	Minimum Cooling Capacities for Refrigerated Freeboard Chillers on Vapor Degreasers	121
(12.0)	Reg 9	Reduction of Automotive Air Pollution	122
(12.0)	Reg 11	Control of Air Contaminant Emission from Motor Vehicles	130

REVISED STANDARD SUBJECT INDEX

1.0 DEFINITIONS
2.0 GENERAL PROVISIONS AND ADMINISTRATIVE PROCEDURES
3.0 REGISTRATION CERTIFICATES, OPERATING PERMITS AND APPLICATIONS
4.0 AIR QUALITY STANDARDS (PRIMARY AND SECONDARY)
    4.1 PARTICULATES
    4.2 SULFUR DIOXIDE
    4.3 NITRIC OXIDES
    4.4 HYDROCARBONS
    4.5 CARBON MONOXIDE
    4.6 OXIDANTS
    4.7 OTHERS
5.0 VARIANCES
6.0 COMPLIANCE SCHEDULES
7.0 EQUIPMENT MALFUNCTION AND MAINTENANCE
8.0 EMERGENCY EPISODES
9.0 AIR QUALITY SURVEILLANCE AND SOURCE TESTING
10.0 NEW SOURCE PERFORMANCE STANDARDS
11.0 NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS
12.0 MOTOR VEHICLE EMISSIONS AND CONTROLS
13.0 RECORD KEEPING AND REPORTING
14.0 PUBLIC AVAILABILITY OF DATA
15.0 LEGAL AUTHORITY AND ENFORCEMENT
16.0 HEARINGS, COMPLAINTS, AND INVESTIGATIONS
17.0 PREVENTION OF SIGNIFICANT DETERIORATION
18.0 AIR QUALITY MAINTENANCE AREA
19.0 EMISSION OFFSET POLICY
20.0 MAJOR STATIONARY SOURCES
21.0 - 49.0
    RESERVED FOR FUTURE EXPANSION OF COMMON INDEX
50.0 POLLUTANT - SPECIFIC REGULATIONS
    50.1 PARTICULATES

        50.1.1 PROCESS WEIGHT
        50.1.2 VISIBLE EMISSIONS
        50.1.3 GENERAL
    50.2 SULFUR COMPOUNDS
    50.3 NITRIC OXIDES
    50.4 VOLATILE ORGANIC COMPOUNDS
    50.5 CARBON MONOXIDE
    50.6 ODOROUS POLLUTANTS
    50.7 OTHERS (Pb, Hg, etc.)
51.0 SOURCE CATEGORY SPECIFIC REGULATIONS
    51.1 AGRICULTURAL PROCESSES (includes Grain Handling, Orchard Heaters, Rice and Soybean Facilities, Related Topics)
    51.2 COAL OPERATIONS (includes Cleaning, Preparation, Coal Refuse Disposal Areas, Coke Ovens, Charcoal Kilns, Related Topics)
    51.3 CONSTRUCTION (includes Cement Plants, Materials Handling, Topics Related to Construction Industry)
    51.4 FERROUS FOUNDRIES (includes Blast Furnaces, Related Topics)
    51.5 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - Particulates (includes Fuel Content and Other Related Topics)
    51.6 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - SO_2 (includes Fuel Content and Other Related Topics)
    51.7 FUEL BURNING EQUIPMENT (oil, natural gas, coal) - NO_2 (includes Fuel Content and Other Related Topics)
    51.8 HOT MIX ASPHALT PLANTS
    51.9 INCINERATION
    51.10 NITRIC ACID PLANTS
    51.11 NON-FERROUS SHELTERS (Zn, Cu, etc.) - Sulfur Dioxide
    51.12 NUCLEAR ENERGY FACILITIES (includes Related Topic)
    51.13 OPEN BURNING (includes Forest Management, Forest Fire, Fire Fighting Practice, Agricultural Burning and Related Topics)
    51.14 PAPER PULP; WOOD PULP AND KRAFT MILLS (includes Related Topics)
    51.15 PETROLEUM REFINERIES
    51.16 PETROLEUM STORAGE (includes Loading, Unloading, Handling and Related Topics)
    51.17 SECONDARY METAL OPERATIONS (includes Aluminum, Steel and Related Topics)
    51.18 SULFURIC ACID PLANTS

51.19 SULFURIC RECOVERY OPERATIONS
51.20 WOOD WASTE BURNERS
51.21 MISCELLANEOUS TOPICS
51.22 COATING OPERATIONS (Can, Coil, Paper, Fabric, Vinyl, Metal, Wire, Surface Coating)
51.23 CUTBACK ASPHALT
51.24 SOLVENT METAL CLEANING

COMMON PROVISIONS REGULATION

I. DEFINITIONS, STATEMENT OF INTENT AND GENERAL PROVISIONS APPLICABLE TO ALL EMISSION CONTROL REGULATIONS ADOPTED BY THE COLORADO AIR QUALITY CONTROL COMMISSION.

A. APPLICABILITY:

Emission control regulations adopted by the Commission apply throughout Colorado unless otherwise stipulated. The statement of intent, definitions, and general provisions of this regulation apply to all emission control regulations adopted by the Commission unless otherwise stipulated.

B. AUTHORITY:

"Section 25-7-109 of the Colorado Air Quality Control Act (CRS 1973 AS AMENDED) provides: 'As promptly as possible, the Commission shall adopt and promulgate, and from time to time modify or repeal emission control regulations which require the use of effective practical air pollution controls.'" Sections 25-7-105 through 25-7-110, SECTION 25-7-114 AND SECTION 25-7-117, of the Act are the general statutory authority for adoption by the Air Quality Control Commission of standards, regulations, and programs. (6-5-80)

C. COLORADO AIR QUALITY CONTROL ACT (1979) LEGISLATIVE DECLARATION 25-7-102.

In order to foster the health, welfare, convenience, and comfort of the inhabitants of the State of Colorado and to facilitate the enjoyment and use of the scenic and natural resources of the State, it is declared to be the policy of this State to achieve the maximum practical degree of air purity in every portion of the State, to attain and maintain the national ambient air quality standards, and to prevent the significant deterioration of air quality in those portions of the State where the air quality is better than the national ambient air quality standards. To that end, it is the purpose of this article to require the use of all available practical methods which are technologically feasible and economically reasonable so as to reduce, prevent, and control air pollution throughout the State of Colorado; to require the development of an air quality control program in which the benefits of the air pollution control measures utilized bear a reasonable relationship to the economic, environmental, and energy impacts and other costs of such measures; and to maintain a cooperative program between the State and local units of government. It is further declared that the prevention, abatement, and control of air pollution in each portion of the state are matters of statewide concern and are affected with a public interest and that the provisions of this article are enacted in the exercise of the police powers of this State for the purpose of protecting the health, peace, safety, and general welfare of the people of this State.

D. INTENT:

To implement the legislative declaration and other sections of the Act, the Commission declares that it is the intent and purpose of these regulations:

1. To achieve and maintain levels of air quality which will protect human health and safety, prevent injury to plant and animal life, prevent damage to property, prevent unreasonable interference with the public welfare, preserve visibility and protect scenic, aesthetic and historic values of Colorado;

2. to require the use of all available practicable methods to reduce, prevent, and control air pollution for the protection of the health, safety, and general welfare of the people of the State of Colorado. In order to achieve air purity consistent with this intent, it may be necessary, ultimately, to control air contaminant emissions to such a degree of opacity so that the emissions are no longer visible;

3. to prevent significant degradation of Colorado's air resource;

4. to prevent odors and other air pollution problems which interfere with the comfortable enjoyment of life, and

5. to apply the major resources of the Colorado air pollution control programs toward solving priority air pollution problems.

E. GROWTH:

The Commission recognizes that the growth in the amount and complexity of air pollution in Colorado is brought about by and incident to population growth, mobility, increased affluence, industrial development and changing social values in said State.

The Commission believes that the air pollution problem is likely to be aggravated and compounded by additional population growth, mobility, affluence, industrial development, and changing social values in the future, which are likely to result in serious potential danger to the public and the environment. Therefore, the Commission intends to pursue solutions, in conjunction with other appropriate agencies and interests, which have a direct interest and capability in solving a growing air pollution problem in relation to the broader environmental degradation problem. It is the intent of the Commission to coordinate with industrial, commercial, agricultural, and transportation planning organizations, land use and other environmental organizations, the public, the legislature, educational organizations, and other major interests in such a manner as to prevent air pollution in Colorado.

F. ABBREVIATIONS:

Abbreviations used in this regulation have the following meaning:

ASTM	-American Society for Testing and Materials
APEN	-Air Pollutant Emission Notice
BACT	-Best Available Control technology
BTU	-British thermal unit
°C	-degree Celsius (centigrade)
cal	-calorie
CdS	-Cadmium sulfide
cfm	-cubic feet per minute
CO	-carbon monoxide
CO_2	-carbon dioxide
dscm	-dry cubic meter(s) at standard conditions
dscf	-dry cubic feet at standard conditions
EPA	-United States Environmental Protection Agency
eq	-equivalence
°F	-degree Fahrenheit
ft	-feet

g	-gram(s)
gal	-gallon(s)
g eq	-gram equivalents
gr	-grain(s)
hr	-hour(s)
HCl	-hydrochloric acid
Hg	-mercury
H_2O	-water
H_2S	-hydrogen sulfide
H_2SO_4	-sulfuric acid
Hz	-hertz
in	-inch(es)
J	-joule
$^\circ K$	-degree Kelvin
kg	-kilogram(s)
LAER	-Lowest Achievable Emission Rate
l	-liter(s)
lpm	-liter(s) per minute
lb	-pound(s)
m	-meter(s)
m eq	-milliequivalent(s)
min	-minute(s)
mg	-milligram(s)
ml	-milliliter(s)
mm	-millimeter(s)
mol	-mole
mol. wt.	-molecular weight
mV	-millivolt
N	-newton
NAAQS	-National Ambient Air Quality Standards
N_2	-nitrogen
ng	-nanogram (10^{-9} grams)
NO	-nitric oxide
NO_2	-nitrogen dioxide
NO_x	-nitrogen oxides
NSPS	-New Source Performance Standards
O_2	-oxygen
Pa	-pascal
ppb	-parts per billion
ppm	-parts per million
psia	-pounds per square inch absolute
psig	-pounds per square inch gauge
RACT	-Reasonably Achievable Control Technology
$^\circ R$	-degree Rankine
RFP	-Reasonable Further Progress
std	-at standard conditions
sec	-second
SIP	-State Implementation Plan
SO_2	-sulfur dioxide
SO_3	-sulfur trioxide
SO_x	-sulfur oxides

TSP -Total Suspended Particulates
ug -microgram(s) (10^{-6} gram)
V -volt
VOC -Volatile Organic Compound
W -watt
O -ohm

G. DEFINITIONS:

The following words and phrases shall have the following meanings unless the context in which they are used requires specific meaning within separate Commission regulations. In those instances, words and phrases shall be defined in the appropriate regulation.

ABSOLUTE VAPOR PRESSURE	the pressure-relative to an absolute vacuum - which a confined vapor exerts at a given temperature when in equilibrium with its solid or liquid state. (5-22-80)
ACT	the "Colorado Air Quality Control Act" being Article 7 of Title 25, Colorado Revised Statutes, 1973, as amended.
AIR POLLUTANT	any fume, smoke, particulate matter, vapor, gas, or combination thereof which is emitted into or otherwise enters the atmosphere, including, but not limited to, any physical, chemical, biological, radioactive (including source material, special nuclear material, and by-product materials) substance or material, but does not include water vapor or steam condensate. (6-5-80)
AIR POLLUTION	any concentration of one or more air pollutants in the ambient air that has caused, is causing, or if unabated, may cause injury to human, plant, or animal life, or injury to property, or which unreasonably interferes with the comfortable enjoyment of life or property or with the conduct of business.

AIR POLLUTION CONTROL AUTHORITY	the Division or any person or agency given authority by the Division or a local government unit duly authorized with respect to air pollution control.
ALLOWABLE EMISSION	the emission rate calculated for a stationary source using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both) and the most stringent of the following: (a) The applicable standards promulgated pursuant to the federal act for new source performance or hazardous air pollutants; (b) The applicable Colorado emission control regulation; or (c) The emission rate specified as a permit condition. (6-5-80)
ALTERNATIVE METHOD	any method of sampling and analysis for an air pollutant which is not a reference or equivalent method, but which has been approved by the Division.
AMBIENT AIR	that portion of the atmosphere, external to the source, to which the general public has access. (6-5-80)
ATMOSPHERE	the surrounding or outside air; i.e., external to buildings. Emissions of air pollutants from a building or structure not specifically designed to control pollutant emissions from sources within such building or structure shall constitute an emission into the ambient air or atmosphere.
AREA CLASSIFICATION	the Commission has classified the entire State into attainment, non-attainment, or unclassifiable areas. Attainment or non-attainment with National Air Quality Standards or

	unclassifiable where a lack of air quality data exists. (6-5-80)
ASBESTOS	fibrous forms of actinolite, amosite, anthophyllite, chrysolite, crocidolite, or tremolite.
ASBESTOS MATERIAL	asbestos or any material containing asbestos.
ASBESTOS TAILINGS	any solid waste product of asbestos mining or milling operations which contain asbestos.
ASPHALT CONCRETE PLANT	any facility used to manufacture asphalt concrete by heating and drying aggregate and mixing with asphalt compounds.
ASPHALT PAVING MATERIAL	a petroleum based asphaltic compound used in the preparation of asphalt concrete for application to roads, highways, and streets.
ATTAINMENT AREA	any area within Colorado designated by the Commission in which the ambient air concentrations of any designated pollutants are less than that specified in the national ambient air quality standards.
BEST AVAILABLE CONTROL TECHNOLOGY (BACT)	That technology which will achieve the maximum degree of emission control of each air pollutant subject to regulation emitted from or which results from any major stationary source or major modification which the division or board, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such air pollutant. In no event shall application of best available control technology result in emissions of any air pollutants which will exceed the emissions allowed by any

	applicable standard established pursuant to Section 111 or 112 of the Federal Act. (6-5-80)
BASIC OXYGEN PROCESS FURNACE (BOPF)	any furnace producing steel by charging scrap steel, hot metal, and flux materials into a vessel and introducing a high volume of an oxygen-rich gas.
BERYLLIUM	the element beryllium. Where weights or concentrations are specified, such weights or concentrations apply to beryllium only, excluding the weight or concentration of associated elements.
BERYLLIUM ALLOY	any metal to which beryllium has been added in order to increase its beryllium content and which contains more than 0.1 percent beryllium by weight.
BERYLLIUM CONTAINING WASTE	material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to Section III. of Regulation No. 8.
BERYLLIUM EXTRACTION PLANT	any facility chemically processing beryllium ore to beryllium metal, alloy, oxide, or compound or performing any of the intermediate steps in these processes.
BERYLLIUM FOUNDRY	a facility engaged in the melting or casting of beryllium metal or alloys.
BERYLLIUM ORE	any naturally occurring material mined or gathered for its beryllium content.
BLOWDOWN	purging of refinery process equipment vessels of their contents to provide a safe atmosphere for workmen.
BOARD	the Air Quality Hearings Board. (6-5-80)
BULK PLANT	a petroleum distillate storage and distribution facility that has an average daily throughput of 76,000

	liters (20,000 gallons) or less, which is loaded directly into delivery vehicles (as used herein, "bulk plant" does not include service stations or a separate operation within a petroleum distribution facility - which pumps only into fuel tanks fueling motor vehicles and trucks. (5-22-80)
CAPACITY FACTOR	the ratio of average load to the capacity rating of the machine or equipment for the specified period of time.
CAPTURE SYSTEM	the equipment including hoods, ducts, fans, dampers, etc., used to capture or transport air pollutants.
CELL ROOM	a structure(s) housing one or more mercury electrolytic chlor-alkali cells.
CERAMIC PLANT	a manufacturing plant producing ceramic items.
CLAUS SULFUR RECOVER PLANT	a process unit which recovers sulfur from hydrogen sulfide by a vapor-phase catalytic reaction involving sulfur dioxide and hydrogen sulfide.
COAL	all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM Designation D-388-66.
COAL PREPARATION PLANT	any facility (excluding underground mining operations) which prepares coal by one or more of the following processes; breaking, wet or dry cleaning, crushing, screening, and thermal drying.
COAL PROCESSING AND CONVEYING EQUIPMENT	any machinery used to reduce the size of coal or to separate coal from refuse; the equipment used to convey coal or to remove coal from refuse; the equipment used to convey coal or to remove coal and refuse from the machinery including, but not limited to, breakers, crushers, screens, and conveyor belts.

COAL REFUSE	waste products of coal mining, cleaning, and preparation.
COAL STORAGE SYSTEM	any facility used to store coal except for open storage areas.
COMMENCED CONSTRUCTION	when the owner or operator has obtained all necessary preconstruction approvals or permits required by federal, state, or local air pollution and air quality laws and regulations and has either (a) begun, or caused to being, a continuous program of physical on-site construction of the facility, or (b) entered into binding agreements or contractual obligation which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the facility to be completed within a reasonable time.
COMMENCEMENT OF OPERATION	a new source commences operation when it first conducts the activity for which it was designed and permitted (i.e., producing cement or generating electricity). (6-5-80)
COMMISSION	the Air Quality Control Commission created by Section 25-7-104, CRS 1973 as amended.
CONDENSER STACK GASES (MERCURY)	the gaseous effluent evolved from the stack of process equipment utilizing heat to extract mercury metal from ore.
CONSTRUCTION	a fabrication, erection, or installation of a stationary air pollutant source.
CONTINUOUS MONITORING SYSTEM	the total equipment required under the emission monitoring subsections of these regulations.
CONTROL DEVICE (STATIONARY)	the air pollution control equipment to remove air pollutants generated by a stationary source.

CONTROL DEVICE (MOBILE)	air pollution control equipment used to remove air pollutants generated by mobile sources.
CRUDE OIL	raw petroleum as it comes from the well, as pyrolyzed from kerogen, processed from tires, or recovered from other recycling processes.
CYCLONIC FLOW	a spiraling movement of exhaust gases within a duct or stack.
DAY	a single 24 hour period from midnight to midnight.
DENUDER	a container which is part of a mercury chlor-alkali cell and in which water and alkali metal amalgam are converted to alkali metal hydroxide, mercury, and hydrogen gas in a short-circuited electrolytic reaction.
DEPARTMENT	the Colorado Department of Health.
DEPARTMENT OF REVENUE	the Colorado Department of Revenue.
DIVISION	the Air Pollution Control Division of the Colorado Department of Health except where specifically designated as the Division of Administration of the Colorado Department of Health.
DUST HANDLING EQUIPMENT	any equipment used to transport, convey, or otherwise handle particulate matter which has been collected by an air pollution control device.
EMISSION	the discharge or release into the atmosphere (ambient air) of one or more air pollutants.
EMISSION CONTROL REGULATION	any standard promulgated by regulation which is applicable to all air pollutant sources within a specified area and which prohibits or establishes permissible limits for specific types of emissions in such areas. Also any regulation which

	by its terms is applicable to a specified type of facility, process, or activity for the purpose of controlling the extent, degree, or nature of pollutants emitted from such type of facility, process, or activity. Also, any regulation adopted for the purpose of minimizing or preventing the emission of any air pollutant in potentially dangerous quantities. Except for emission control regulations pertaining to hazardous air pollutants emission control regulations shall not include standards which describe maximum ambient air concentrations of specifically identified pollutants or which describe varying degrees of pollution of ambient air. (6-5-80)
EMISSION STANDARD	see STANDARD OF PERFORMANCE
END BOX	a container(s) located on one or both ends of a mercury chlor-alkali electrolyzer which serves as a connection between the electrolyzer and denuder for rich and stripped amalgam.
END BOX VENTILATION	a ventilation system which collects mercury emissions from the end-boxes, the mercury pump sumps, and their water collection systems.
EQUIVALENT METHOD OF SAMPLING AND ANALYSIS	any method of sampling and analysis of an air pollutant which has been demonstrated to the Division's satisfaction as having a consistent and quantitatively known relationship to a reference test method.
EXCAVATION	the removal of surface material, which may or may not be replaced, for the purpose of constructing or installing a structure or piece of equipment.
EXCESS EMISSION	emissions of an air pollutant in excess of a performance standard promulgated by the Commission
FEDERAL ACT	the Federal Clean Air Act (42 USC 7401 et. seq.) as amended August 7, 1977. (6-5-80)

FOSSIL FUEL	natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials.
FOSSIL FUEL AND/OR WOOD RESIDUE-FIRED STEAM GENERATING UNIT	a furnace or boiler burning a fossil fuel and/or wood residue and producing steam by heat transfer.
FOUNDRY	a facility engaged in the melting or casting of metals or alloys.
FUEL BURNING EQUIPMENT	any furnace, boiler, or other equipment and appurtenances thereto, burning fuel solely for the purpose of producing heat.
FUGITIVE DUST	solid airborne particulate matter emitted from any source other than an opening which channels the flow of pollutants directly into the atmosphere. Fugitive dust also includes solid particles released into the atmosphere by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, sweeping, etc.
FUGITIVE EMISSIONS	air pollutants emitted from any source other than an opening which channels the flow of pollutants directly into the atmosphere. (6-5-80)
GRADING	the movement of soil for the purpose of establishing grade and drainage.
HAZARDOUS AIR POLLUTANT	an air pollutant to which no national ambient air quality standard is applicable and which causes or contributes to air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness or injury. (6-5-80)

HIGHLY VOLATILE ORGANIC COMPOUND	a volatile organic compound or mixture of such compounds with a vapor pressure in excess of 570 torr (11 psia) at 20°C. (5-22-80)
HOURLY PERIOD	any 60 minute period.
HYDROCARBON	an organic compound consisting only of carbon and hydrogen.
HYDROGEN GAS STREAM	a hydrogen stream formed in the chlor-alkali denuder.
INCINERATOR	any equipment, device, or contrivance used for the destruction of solids, liquids or gaseous wastes by burning other than devices commonly called wigwam waste burners used exclusively to burn wood wastes.
ISOKINETIC SAMPLING	sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.
LOWEST ACHIEVABLE EMISSION RATE (LAER)	the most stringent emission limitation which is achieved in practice or can reasonably be expected to occur in practice by such class or category of source, taking into consideration the pollutant which must be controlled.
LEAD	elemental lead, lead-containing alloys and compounds of lead.
MACHINE SHOP	a facility performing cutting, grinding, turning, honing, milling, deburring, lapping, electro-chemical machining, etching, or other similar operations.
MALFUNCTION	means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. (6-5-80)

MERCURY CHLOR-ALKALI CELL	a device which is basically composed of an electrolyzer section and a denuder (decomposer) section and utilizes mercury to produce chlorine gas, hydrogen gas, and alkali metal hydroxide.
MERCURY CHLOR- ALKALI ELECTROLYZER	an electrolytic device which is part of a mercury chlor-alkali cell and utilizes a flowing mercury cathode to produce chlorine gas and alkali metal amalgam.
MERCURY	the element mercury in the form of vapor, liquid, and particulates.
MERCURY ORE	a mineral mined specifically for its mercury content.
MERCURY ORE PROCESSING FACILITY	a facility processing mercury ore to obtain mercury.
MODIFICATION	any physical change in, or change in the method of operation of, a stationary source which increases the emission rate of any pollutant for which a federal or state emission standard has been promulgated or which results in the emission of any such pollutant previously not emitted. The following exceptions apply: a. Routine maintenance, repair, and replacement shall not be considered a physical change. b. Unless previously limited by enforceable permit terms and conditions, the following shall not be considered to be a change in the method of operation: (i) An increase in the production rate if such increase does not exceed the design capacity of the source and does not lead to emissions in excess of the emission standards.

(ii) An increase in the hours of operation which does not lead to emissions in excess of the emission standards.

(iii) Use of an alternative fuel or raw material by reason of an order in effect under Sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation, a prohibition under the Federal Power Plan and Industrial Fuel Act of 1978 or any superseding legislation) or by reason of a natural gas curtailment plan in effect pursuant to the federal Power Act;

(iv) Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act; or

(v) change in ownership of the source; or

c. An increase in the sulfur dioxide emission rate which results from the addition of new emission control equipment to an existing source in an attainment area for sulfur dioxide shall not be considered a modification if there is no increase in the emission rate of pollutants other than sulfur dioxide and if the resulting sulfur dioxide emissions are within federal and state sulfur dioxide emission standards for existing sources.

d. Emissions resulting from construction and exploration, shall be excluded in determining whether a modification will occur. (6-5-80)

MONITORING SYSTEM	the complete set of equipment required under these regulations whichis used to measure and record, if so required, those parameters specified.
MOTOR VEHICLE	any vehicle with four or more wheels which is operated on the ground, self-propelled with gasoline as a fuel, and designed and manufactured primarily for the transportation of not more than ten people. Any truck having a gross vehicle weight of 8,500 pounds or less (manufacturer rated) and for which registration in Colorado is required for operation on public roads and highways.
MOTOR VEHICLE EXHAUST GAS ANALYZER	any instrument approved by the Division which is used to measure the concentrations of carbon monoxide and hydrocarbons in motor vehicle exhaust.
NON-ATTAINMENT AREA	any area within Colorado designated by the Commission in which ambient air concentrations of any designated pollutant exceed the national ambient air quality standards for that pollutant.
OPACITY	the degree to which an air pollutant obscures the view of an observer, expressed in percentage of obscuration or the degree (expressed in percent) to which transmittance of light is reduced by the air pollutant.
OPEN BURNING	burning any material or substance in the ambient air or in a receptacle, other than a properly designed furnace such as an incinerator, or other equipment connected to a stack or chimney. Cutting and welding torches are excepted.
OVERLOTTING	earth moving used in land development prior to the construction of structures.
OWNER OR OPERATOR	any person who owns, leases, operates, controls, or supervises an air pollution source.

PARTICULATE ASBESTOS MATERIAL	finely divided particles of asbestos material.
PARTICULATE MATTER	any material, except uncombined water, that exists in finely divided form as a liquid or solid. For emission monitoring purposes only, particulate matter is the material collected in the front half of an EPA Method 5 sample train.
PERSON	any individual, public or private corporation, partnership, association, firm, trust estate, the State or any department, institution or agency thereof, any municipal corporation, county, city and county, or other political subdivision of the State, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.
PETROLEUM	the crude oil removed from the earth and the oils derived from tar sands, shale, and coal
PETROLEUM DISTILLATE	a volatile organic compound or a mixture including volatile organic compounds obtained from petroleum by a process of vaporization and condensation.
PETROLEUM REFINERY	any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation, cracking, or reforming of unfinished petroleum derivatives.
PILOT PLANT	small scale facility first used for experimental purposes to study the feasibility of an operation prior to constructing a full scale plant. (6-5-80)
PORTLAND CEMENT PLANT	any facility manufacturing portland cement by either the wet or dry process.

POTENTIAL TO EMIT	The established rate of emissions based upon full design capacity after the application of air pollution controls. In determining full design capacity, consideration shall be given to enforceable permit conditions which limit the operating rate or hours of operation or which limit the type or amount of material combusted or processed. (6-5-80)
PRIMARY ALUMINUM REDUCTION PLANT	any facility manufacturing aluminum by electrolytic reduction.
PRIMARY COPPER SMELTER	any installation or intermediate process in production of copper through the use of pyrometallurgical techniques.
PRIMARY LEAD SMELTER	any installation or any intermediate process employed in the production of lead through the use of pyrometallurgical techniques.
PRIMARY ZINC SMELTER	any installation engaged in the production or any intermediate process in the production of zinc or zinc oxide through the use of pyrometallurgical techniques.
PROCESS OR PROCESS EQUIPMENT	any action, operation or treatment involving chemical, industrial, or manufacturing factors, such as heat treating furnaces, mixing kettles, cupolas, blast furnaces, heating and reheating furnaces, puddling furnaces, sintering trains, electric furnaces, kilns, stills, dryers, roasters, and equipment used in connection therewith, and all other methods and forms of manufacturing or processing that may emit air pollutants.
PROCESS UNIT	any single process or piece of process equipment.
PROCESS WEIGHT	the total weight of all materials introduced into a source operation, which source causes any discharge of air pollutants into the atmosphere. Solid fuels introduced into

	any specific source will be considered as part of the process weight, but liquid and gaseous fuels and combustion air including required excess air, will not.
PROCESS WEIGHT RATE	a rate established as follows: a. for continuous source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period, or b. for cyclical or batch unit operations or unit processes, the total process weight for a period that covers a complete operation or an integral number of such cycles, divided by the hours of actual process operation, or c. for operations not specified above determine the process weight that results in a minimum value for allowable emissions.
PROPELLANT	a fuel and oxidizer physically or chemically combined which undergoes combustion to provide propulsion.
PROPELLANT PLANT	any facility engaged in the mixing, casting, or machining of propellant.
PUBLIC ACCESS	a site to which the general public has access in that entry onto such site is allowed or not prevented by natural or man-made barriers. A site shall be deemed to be not accessible to the public if entry onto the property (a) is prevented by natural barriers (e.g., wide rivers, cliffs, vast roadless areas) or man-made barriers (e.g., fences); (b) active security measures (e.g., frequent patrolling, watch dogs); or (c) other measures or combinations of measures which effectively prevent entry onto the property by members of the general public. Posting of "no trespassing" signs alone shall not be deemed as preventing public

	access. Determination of public accessability shall be made on a site-by-site basis. (6-5-80)
REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT)	that technology which will achieve the maximum degree of emission control that a particular source is capable of meeting and which is reasonably available considering technological and economic feasibility. It may require technology that has been applied to similar, but not necessarily identical, source categories. It is not intended that extensive research and development be conducted before a given control technology can be applied to the source. This does not, however, preclude requiring a short-term evaluation program to permit the application of a given technology to a particular type of source. (5-22-80)
REASONABLE FURTHER PROGRESS	annual incremental reductions in emissions of the applicable air pollutant (including substantial reductions in the early years following approval or promulgation of plan provisions under the Clean Air Act, part and section 110(a)(2)(I) and regular reductions thereafter) which are sufficient in the judgment of the Commission, to provide for attainment of the applicable NAAQS by the date required in Section 172(a). (6-5-80)
REFERENCE TEST METHOD	any method for the sampling and analysis of an air pollutant emission as designated by the United States Environmental Protection Agency in the most recent edition of Appendix A to Part 60, Chapter 1, Title 40, Code of Federal Regulations for specific source categories and published in the Federal Register or any alternate or equivalent method approved and/or specified by the Commission or Division
REFINERY PROCESS UNIT	any segment of the petroleum refinery in which a specific processing operation is conducted.

REFINERY PROCESS UNIT TURNAROUND	scheduled shutdown of a refinery process unit for the purpose of inspection or maintenance.
REID VAPOR PRESSURE	the absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum liquids except liquified petroleum gases as determined by ASTM-D323-58 (reapproved 1968).
RESIDENTIAL STRUCTURES	all buildings or other structures used primarily as a place of residence and includes both single and multi-family residential dwellings. (6-5-80)
RUN	the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous.
SHOP	the building which may house one or more air pollutant sources.
SHOP OPACITY	the opacity of the emissions emanating from the shop.
SHUTDOWN	the cessation of operation of an air pollutant source for any purpose.
SINTER BED	a mixture of finely divided metallic bearing material, solid fuel, and additives on a sinter machine grate.
SINTERING MACHINE	a process unit consisting of a traveling grate on which metallic bearing fine material is processed by heating to produce and agglomerate the material into a hard porous mass called sinter.
SINTERING MACHINE DISCHARGE END	that part of a sintering machine where the sinter grate discharges the sinter into a breaker, conveyer, or other apparatus.
SLAG	the fused product formed by the action of a flux upon the gangue of an ore or fuel, or upon the oxidized impurities in metal.

SOLID WASTE	any waste classified as Type "0" through Type "6" as specified in the I.I.A. (Incinerator Institute of America).
SMELTING	the process by which molten metal is produced by the reduction of ore.
STACK OR CHIMNEY	any flue, conduit, or duct arranged to conduct an air pollutant to the ambient air.
SOURCE DEFINITIONS:	
AIR POLLUTION SOURCE	any structure, building, facility, equipment, installation, process or activity or any combination thereof, at, from, or by reasons of which, there is emitted or discharged into the atmosphere, any air pollutant. (6-5-80)
EXISTING SOURCE	any air pollutant source which has been constructed, is in operation, or has received an initial approval of an emission permit prior to the effective date of the applicable regulation. (6-5-80)
INDIRECT SOURCE	means any facility, building, structure, or installation, or any combination thereof, excluding dwellings, which can reasonably be expected to cause or induce substantial mobile source acitivty which results in emissions of air pollutants which might reasonably be expected to interfere with the attainment and maintenance of national ambient air standards. (6-5-80)

MOBILE SOURCE	motor vehicles and other sources of air pollution which emit pollutants while moving and which are capable of and commonly do not remain at one site (one or more contiguous or adjacent properties owned or operated by the same person or by persons under common control). (6-5-80)
NEW SOURCE	any stationary air pollution source, other than an existing source; or any source which resumes operation after being inactive for more than one year after having been shut down for the purpose of eliminating emissions which violated any applicable emission control regulation or regulation for the control of hazardous air pollutants. (6-5-80)

PORTABLE SOURCE	any source such as, but not limited to, asphalt batch plants and aggregate crushers which commonly and by usual practice are moved from one site to another, a source will not be considered portable if it remains on one site for more than two years.
STATIONARY SOURCE	any air pollution source which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person or by persons under common control; except that properties which are or will be used only for right-of-way, transmission, gathering, transportation, communication, pipeline, or similar purposes shall not be considered contiguous or adjacent properties. (6-5-80)
STANDARD CONDITIONS	a gas temperature of 20°C and a gas pressure of one atmosphere (760 torr).
STANDARD OF PERFORMANCE	a regulation (or portion thereof) setting for a maximum allowable emission rate of pollutant, emission concentration, and/or level of opacity for air pollutants.
STARTUP	any setting in operation of an air pollutant source for any purpose.
STEEL PRODUCTION CYCLE	the operation of a basic oxygen process furnace required to produce each batch of steel and includes the following major functions: scrap charging, preheating (when used), hot metal charging, primary oxygen blowing, additional oxygen blowing (when used), and tapping.
SUBMERGED FILL PIPE	any gasoline or petroleum distillate tank fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank. "Submerged fill pipe" when applied to a tank

	which is loaded from the side is defined as any fill pipe the discharge opening of which is entirely submerged when the liquid level is 18 inches above the bottom of the tank.
SULFURIC ACID PLANT	any facility producing sulfuric acid by the contact process.
TAPPING	the removal of molten slag or metal from a furnace under normal operating conditions. Slag removal is commonly referred to as "flushing" and metal removal as "tapping" or "casting." For the purposes of this regulation, no such differentiation is made.
TERMINALS	a petroleum distillate storage and distribution facility that has an average daily throughput of more than 76,000 liters (20,000 gallons), which is loaded directly into transport vehicles. (5-22-80)
THERMAL DRYER	any process in which the moisture content of a processed material is reduced by contact with a heated stream of air or other gases which is exhausted to the ambient air.
TRANSFER AND LOADING SYSTEM	any equipment or processes used to transfer or load materials for storage or shipment.
UNCLASSIFIED AREA	any area within Colorado which cannot, on the basis of available information, be classified as attainment or non-attainment.
UPSET CONDITIONS	an unpredictable failure of air pollution control or process equipment which results in the violation of emission control regulations and which is not due to poor maintenance, improper or careless operations, or is otherwise preventable through exercise of reasonable care.

VAPOR BALANCE SYSTEM	the connecting together of the vapor spaces of two vessels such that when liquid is dispensed from the first vessel into the second vessel, the vapor in the second vessel is displaced by the incoming liquid and forced through the connection into the first vessel. This vapor then occupies the space in the first vessel that is vacated by the dispensed liquid. (5-22-80)
VAPOR RECOVERY SYSTEM	a vapor collection system capable of collecting substantially all the volatile vapors and gases discharged from the storage vessel and a vapor disposal system capable of processing such vapors and gases so as to prevent any substantial emission to the ambient air.
VOLATILE ORGANIC COMPOUND (VOC) (see also Highly Volatile Organic Compound)	any compound of carbon (excluding carbon dioxide, carbon monoxide, carbonic acid,metallic carbides or carbonates, and ammonium carbonate) that has a vapor pressure of 0.1 millimeter of mercury (0.1 torr) or greater at standard conditions. (5-22-80)
WOOD RESIDUE	bark, sawdust, slabs, chips, shavings, mill trim, and other wood products derived from wood processing and forest management operations.

II. GENERAL

A. TO CONTROL EMISSIONS LEAVING COLORADO:

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving state to be exceeded, provided reciprocal action is taken by the receiving State.

B. EMISSION MONITORING REQUIREMENTS:

The Division may require owners or operators of stationary air contamination sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division

C. PERFORMANCE TESTING:

1. The owner or operator of any air contaminant source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

2. Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

   a. Specifies or approves, in specific cases, the use of a test method with minor changes a.in methodology;

   b. approves the use of an equivalent method;

   c. Approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance, or

   d. Waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under Article 7 of Title 25, Colorado Revised Statutes 1973, and regulations of the Commission implemental thereof.

3. Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

4. The owner or operator of an affected facility shall provide the Division 30 days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the 30 day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

5. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

   a. Sampling ports adequate for test methods applicable to such facility,

   b. Safe sampling platform(s)

   c. Safe access to sampling platform(s)

   d. Utilities for sampling and testing equipment.

6. Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

7. Criteria shall be established by the Division for the implementation of the requirements specified by SectionII.D. of this regulation.

8. Nothing in this Section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

D. AMBIENT AIR MONITORING REQUIREMENTS: (Reserved)

E. UPSET CONDITIONS AND BREAKDOWNS:

Upset conditions, as defined, shall not be deemed to be in violation of these regulations provided that the Air Pollution Control Division is notified as soon as possible, but no later than 2 hours after the start of the next working day, followed by written notice to the Division explaining the cause of the occurrence and that proper action has been or is being taken to correct the conditions causing said violation and to prevent such excess emission in the future.

F. CIRCUMVENTION CLAUSE:

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

G. CONFLICTS

Nothing in these regulations is intended to permit any practice which is a violation of any statute, ordinance or regulation.

H. SEVERABILITY CLAUSE:

If any regulation, section, clause, phrase, or standard contained in these regulations shall for any reason be held to be inoperative, unconstitutional, void, or invalid, the validity of the remaining portions thereof shall not be affected thereby and the Commission does hereby declare that it severally passed and adopted the provisions contained therein separately and apart from the other provisions thereof.

III. SMOKING GASOLINE-POWERED MOTOR VEHICLE CONTROL REGION:

Pursuant to Section 18-13-110(1)(a)(ii), CRS 1973 as amended, the Air Quality Control Commission hereby designates the Federal Air Quality Control Region which includes the counties of Adams, Arapahoe, Boulder, Clear Creek, Denver, Douglas, Gilpin, and Jefferson as a "Smoking Gasoline-Powered Motor Vehicle Control Region."

The Commission makes this designation upon review of ambient air quality data and determinations that on at least thirty-one (31) occasions over a period of one (1) year, carbon monoxide levels within the region exceeded 9 ppm (parts per million) averaged over an eight-hour (8-hr.) non-overlapping period.

IV. CONFLICTS OF INTEREST BY COMMISSION OR HEARINGS BOARD MEMBERS:

If a member of the Air Quality Control Commission or the Air Quality Hearings Board perceives he or she has or may have a real, potential, or apparent conflict of interest regarding any matter before the Commission or Board on which he/she serves, he/she shall take one of the following two steps:

1. Disclose the basis of the real, potential, or apparent conflict of interest to the Commission or Board on which he/she serves and others in attendance before the discussion or hearing begins or as soon thereafter as he/she perceives there is or may be a real, potential, or apparent conflict of interest and disqualify himself/herself from any further participation or voting on the matter at hand; or

2. Disclose the basis of the real, potential, or apparent conflict of interest to the Commission or Board on which he/she serves and others in attendance before the discussion or hearing begins or as soon thereafter as he/she perceives there is or may be a real, potential, or apparent conflict of interest. If the member so disclosing the conflict of interest or possible conflict of interest does not disqualify himself/herself from further participation on the matter with which there is or may be a conflict of interest, the Chairman will ask for comments from any members, parties, or public present, and the Commission or Board, after appropriate discussions, will vote on whether there is a conflict, or is not a conflict of interest and the member will be bound by their vote. If the Commission or Board determines that there is a conflict, such member shall be disqualified from further participation or voting on the matter at hand.

Members of the public, parties to the matter at hand, or other Commission or Board members may raise the issue of conflict of interest of members of the Commission or Board. Procedure 2 above will then be followed.

REGULATION NO. 1

Statewide Emission Control Regulations for Existing Stationary Sources

I. SMOKE EMISSIONS AND OPACITY REGULATIONS:

A. Stationary Air Contamination Sources:

1. No person shall emit or cause to be emitted into the ambient air from any air contamination source of emission whatsoever, any air contaminant which is of such a shade or density as to obscure an observer's vision to a degree in excess of 20% opacity; except as otherwise provided by Commission regulation.

2. Exceptions:

   a. Existing Alfalfa Dehydration Plants

   Unitl January 1, 1985, no person shall emit or cause to be emitted to the ambient air any air contaminant which is of such a shade or density to obscure an observers vision to a degree in excess of 40% opacity. After January 1, 1985, paragraph 1. of Section I.A. shall apply.

   b. Pilot Plant or Experimental Operations

   For a period of 180 days after start-up, no person shall emit or cause to be emitted to the ambient air any air contaminant which is of such a shade or density to obscure an observers vision to a degree in excess of 40% opacity for a period or periods aggregating more than three minutes in any 60 minute period. After such time, paragraph 1 of Section I.A. shall apply.

c. Emissions from fireplaces used for non-commercial or recreational purposes shall be exempt from Part I, Section A. 1. of these regulations.

d. Provisions of I. A. 1. shall not apply to emissions during the building of a new fire, cleaning of fires, soot blowing, occasional cleaning of control equipment, the shade or appearance of which is not darker than an equivalent opacity as to obscure an observer's view to a degree not greater than 40% for a period or periods aggregating no more than 3 minutes in any one hour.

e. The provisions of I. A. 1. shall not apply to fugitive dust emissions specifically regulated by Section II. D. of this regulation or for certain iron and steel mill operations specifically regulated by Section III. of this regulation.

3. Emission Monitoring Requirements

a. Definitions

(i) "Fossil Fuel-Fired Steam Generator" means a furnace or boiler used in the process of burning fossil fuel for the purpose of producing steam by heat transfer.

(ii) "Fluid Catalytic Cracking Unit Catalyst Regenerator" means any device used in a petroleum refinery for the express purpose of regenerating spent catalyst by the addition of a controlled amount of air.

(iii) "Capacity Factor" means the ratio of average load on a machine or equipment for the period of time considered to the capacity rating of the machine or equipment.

(iv) "Emission Standard" means an emission control regulation (or portion thereof) setting forth an allowable rate of emissions, prescribing equipment, or fuel specifications that result in control of air contaminants.

(v) "Excess Emissions" means emissions of an air pollutant in excess of an emission standard.

(vi) "Affected Facility" means any air contaminant source subject to emission monitoring requirements.

(vii) "Incinerator" means any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter.

(viii) "Solid Waste" means refuse consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustibles and noncombustible materials such as glass and rock.

(ix) "Portland Cement Plant" means any facility manufacturing portland cement by either the wet or dry process.

(x) "Basic Oxygen Process Furnace" (BOPF) means any furnace producing steel by charging scrap steel, hot metal, and flux materials into a vessel and introducing a high volume of an oxygen-rich gas.

(xi) "Electric Arc Furnace" (EAF) means any furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes.

(xii) "Coal Preparation Plant" means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(xiii) "Thermal Dryer" means any device used in a coal preparation plant in which the moisture content of coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(xiv) "Copper Converter" means any vessel to which copper matte is charged and oxidized to copper.

b. The owner or operator of the following categories of stationary air contaminant sources may be required by the Division to install, maintain, operate, and calibrate equipment for the continuous monitoring of sulfur dioxide. Such monitoring equipment shall be installed, in a location approved by the Division, within 18 months after being notified of the Division's determination that monitoring shall be required. Reasonable extensions may be granted by the Division provided that the owner or operator of such air contaminant sources demonstrates that good faith efforts have been made to obtain and install such devices within such timetable.

(i) Fossil fuel-fired steam generators of greater than 250 million BTU per hour heat input with an average capacity factor of greater than 30 percent where solid, liquid, or gaseous fuel is burned.

(ii) Fluid catalytic cracking unit catalyst regenerators of greater than 20,000 barrels per day fresh feed capacity.

(iii) Incinerators of greater than 50 tons per day charging rate.

(iv) Portland cement plant kilns and clinker coolers.

(v) Pot furnaces, electric furnaces, reverberatory furnaces, and smelting furnaces greater than 550 lbs. charging capacity used in the metallurigical industry.

(vi) Sludge incinerators used in municipal sewage treatment plants treating greater than 1 million gallons per day of waste water.

(vii) Basic oxygen furnaces.

(viii) Electric arc furnaces.

(ix) Dryers, roasters, and sintering machines used in the smelting of metal from ore concentrate.

(x) Thermal dryers.

(xi) Copper converters used in the smelting of copper.

c. Exemptions:

Provisions of Section I.A.3. shall not apply to:

(i) Any affected facility scheduled to cease operation within 5 years of the effective date of this regulation.

(ii) Any affected facility used less than 2 months out of a 12 month period.

(iii) Any affected facility which shows to the satisfaction of the Air Pollution Control Commission that the installation of monitoring equipment would cause an unreasonable economic burden.

(iv) Any fossil fuel-fired steam generator of greater than 250 million BTU per hour heat input where liquid fuel, gaseous fuel, or a combination thereof, is being burned and no air pollution control equipment is required for compliance with emission standards.

d. Performance Specifications

(i) The performance specifications used to determine the acceptability of monitoring equipment installed pursuant to this Section shall conform to those referenced in Appendix B of Part 60, Title 40, Code of Federal Regulations as originally published October 6, 1975, in Volume 40, Number 194, of the Federal Register and any additions thereto, and/or other alternate as approved by the Division.

(ii) A performance evaluation shall be conducted of each continuous monitoring system installed pursuant to Section I.A.3. of this regulation at the end of 168 hours (7 days) of operation and at such other time(s) as designated by the Division.

e. Calibration of Equipment

Owners or operators of all continuous monitoring systems subject to Section I.A.3. of this regulation shall check the zero and span drift at least once per day and at such other times as designated by the Division, according to procedures approved by the Division. The Division may also make such determinations in order to assure proper quality assurance.

f. Notification and Record Keeping

The owner or operator of an affected facility required to install, maintain, and calibrate continuous opacity monitoring equipment shall submit to the Division within 30 days following the end of each calendar quarter, a report of excess emissions for that quarter. This report shall consist of:

(i) The magnitude in actual percent opacity of all one-minute averages of opacity greater than the standard specified in Section I.A. for each hour of operation.

(ii) The nature and cause of the excess emissions, if known.

(iii) The date and time identifying each period of equipment malfunction, except for zero and span checks and the nature of the system repairs or adjustments.

(iv) A schedule of the calibration and maintenance of the continuous monitoring system.

A file of all data collected shall be maintained by the owner or operator of an affected facility for a two year period. The format in which the required information is submitted shall be determined by the Division.

g. The Division may, upon approval of the Commission, waive the continuous monitoring requirements for opacity for any air contaminant source covered under Section I.A.3. of this regulation if it has demonstrated that continuous compliance with applicable opacity standards is being maintained.

B. Open Burning:

1. No person shall burn or permit to be burned on any open premises owned or controlled by him, or on any public street, alley, or other land adjacent to such premises, rubbish, waste, paper, wood, or other flammable material unless a permit therefor shall first have been obtained from the appropriate authority enforcing air pollution control standards or the designee of the Air Pollution Control Division. In granting or denying the issuance of any such permit, said authority shall base its action on the location and proximity of such burning to any building or other structure, the potential contribution of such burning to air pollution in the area, climatic conditions on the day or days of such burning, and compliance by the applicant for the permit with applicable fire protection and safety requirements of the local authority or area, and the air pollution control authority is satisfied that there is no practical alternative method for the disposal of the material to be burned or to conduct the desired activity and that the open burning is conducted in such a reasonable manner so as to minimize emissions, including, but not limited to, the use of non-approvable incinerators and air curtain destructors, the use of auxiliary clean fuel, drying the material prior to ignition and separating out for alternate disposal: rubber, tires, plastics, wire, insulation, and other similar smoke-producing material.

Reproduced from best available copy.

2. Exceptions:

a. The provisions of Part I, Section B of this regulation shall not apply to the non-commercial burning of private household trash in the following areas:

(i) Rural areas not included in cities and towns in any size, and inside a two-mile boundary from the limits of any town having a population of 500 or less as determined by the latest Federal Census;

(ii) Inside a two-mile boundary from the limits of any city or town having a population of 3,500 or less and more than 500, as determined by the latest Federal Census, wherein the governing body of said city or town, as a matter of local option by ordinance, resolution, or rule duly adopted thereby and submitted to the Commission, has acted to permit said burning; except where the areas defined in 2, (i) and (ii) are:

a) inside any non-attainment area for particulate matter.

b) inside any area which the Commission has designated after consultation with appropriate elected officials as having a reasonable alternative to open burning, including, but not limited to, a refuse collection system and sanitary landfill.

b. Fires used for non-commercial cooking of food for human beings or for instructional or recreational purposes shall be exempt from Part I, Section B of these regulations.

c. Smokeless flares or safety flares for the combustion of waste gases shall be exempt from Part I, Section B, of these regulations.

d. Flares used to indicate some danger to the public shall be exempt from Part I, Section B of these regulations.

II. PARTICULATE EMISSION REGULATIONS

A. Existing Fuel-Burning Equipment

1. No person shall cause or permit to be emitted into the ambient air from any existing fuel-burning equipment, or to pass a convenient measuring point near any opening, particulate matter in the flue gases which exceed the following:

   a. 0.5 lbs. per $(10)^6$ BTU heat input for fuel burning equipment of less than $1\,(10)^6$ BTU/hr. total heat input.

   b. For fuel burning equipment with heat inputs greater than $1\,(10)^6$ BTU per hour, but less than $500\,(10)^6$ BTU per hour, the following equation will be used to determine the allowable particulate emission limitation:

   $$PE = 0.5\,(FI)^{-0.26}$$

   Where

   PE = Particulate Emission in Pounds per million BTU heat input.
   FI = Fuel Input in Million BTU per hour.

   c. 0.1 lbs. per $(10)^6$ BTU heat input for fuel burning equipment of greater than $500\,(10)^6$ BTU per hr. or more.

   d. If two or more fuel burning units connect to any opening, the maximum allowable emission rate shall be calculated by summing the individual emission rates.

2. Performance Tests:

   a. The Division may require the owner or operator of any fuel burning equipment to conduct performance tests, in accordance with Section II. C. of the Common Provisions Regulation to determine compliance with this subsection of this regulation.

B. Existing Incinerators

1. Standard of Performance:

   a. In areas designated as non-attainment for particulate matter, no owner or operator of an existing incinerator shall cause or permit emissions of more than 0.10 grain of particulate matter per standard cubic foot. (Dry flue gas corrected to 12% carbon dioxide).

   b. In areas designated as attainment for particulate matter, no owner or operator of an existing incinerator shall cause or permit emission of more than 0.15 grain of particulate matter per standard cubic foot. (Dry flue gas corrected to 12% carbon dioxide).

2. Performance Tests

   a. The Division may require the owner or operator of an existing incinerator to conduct performance test(s) in accordance with procedures outlined in Section II. C. of the Common Provisions Regulation, to determine compliance with this Subsection of this regulation.

C. Existing Manufacturing Processes:

1. In all areas of the State, no owner or operator of an existing manufacturing process unit shall cause or permit emission of any particulate matter to be emitted during any consecutive 60 minute period which is in excess of the following:

   a. For process equipment having process weight rates of up to 60,000 lbs. per hr., the allowable emission rate shall be determined by the use of the equation:

$$PE = 3.59 (P)^{0.62}$$

Where

PE = Particulate emission in lbs. per hour
P = Process weight rate in tons per hour

b. For process equipment having process weight rates of greater than 60,000 lbs. per hour, the allowable emission rate shall be determined by use of the equation:

$$PE = 17.31\,(P)^{0.16}$$

Where

PE = Particulate emission rate in lbs. per hour
P = Process weight rate in tons per hour

c. If two or more process units are connected to the same opening, the maximum allowable emission rate shall be computed by summing the indivdual emission rates.

2. Performance Tests

a. The Division may require the owner of a existing manufacturing process to conduct performance tests, in accordance with those procedures specified by Section II. C. of the Common Provisions Regulation to determine compliance with this subsection of this regulation.

D. FUGITIVE DUST

1. Exemptions: The following sources are exempted from Section II.D.:

   a. Agricultural activities;

   b. Wet mechanical street sweeping.

2. "Fugitive Dust" does not include Fugitive Emissions which are regulated by Section I.A.1. of this regulation.

3. All sources of fugitive dust emissions shall comply with the following requirements, except as specifically exempted:

   a. Earthmoving, Grading and Site Preparation: Except as provided in clause (vii) hereof, all earthmoving, grading and site preparation activities including, but not limited to, overlotting, excavation and finished grading shall comply with the following:

      (i) During the entire construction period, abatement and preventive measures must be applied to all disturbed surfaces. These measures shall also be applied during periods when actual earthmoving, grading and site preparation activities are not being conducted, such as weekends and holidays.

      (ii) Water, with chemical additives if necessary, must be applied on all disturbed soil to prevent visible transport off the property of origination until such time as it has been sufficiently revegetated to prevent such visible transport of fugitive dust. Upon application by the source, the Division may exempt such source from the provision of this clause (ii) upon demonstration by the source to the satisfaction of the Division that sufficient water resources are not available in the area to comply with said requirement.

      (iii) Deposition of dirt or mud on improved streets, roads and driveways adjacent to the source site must be avoided. If such deposition occurs, the dust and mud must be promptly removed.

Reproduced from best available copy.

(iv) On site vehicle speeds shall not exceed 30 miles per hour.

(v) Temporary fencing shall be installed along all boundaries of the disturbed area adjacent to any developed area in such a manner as to prevent the visible transport of soil off the property of origin during periods of high winds.

(vi) Periods of surface disturbance shall be limited to that time minimally necessary to conduct and complete primary project.

(vii) Section II.D.3.a. is only applicable to earth-moving, grading and site preparation activities greater than one (1) acre in size.

(viii) For new sources greater than one (1) acre and up to and including twenty-five (25) acres in size, the owner or operator of said new sources shall prior to commencement of construction of the new source submit the following information to the Division:

(A) Location of the activity, and

(B) General description of the activity.

(ix) In addition to the provisions of clauses (i) through (vi), for sources greater than 25 acres, an emission permit must be obtained through the procedure outlined in Regulation No. 3.

b. Demolition: During demolition and cleanup, mandatory abatement and preventive fugitive dust control measures shall include the following:

(i) Wetting down, including pre-watering of work surfaces, shall be employed.

(ii) Deposition of dirt and mud on improved streets, roads and driveways adjacent to the activity must be avoided. If such deposition occurs it must be promptly removed.

(iii) Compliance with all applicable provisions of Regulation No. 8 dealing with asbestos and demolition.

(iv) Haulage equipment shall be covered or the debris being hauled wetted down to minimize the amount of dust emitted during transit and loading.

(v) These measures (i-iv) shall also be applied during periods when actual demolition work is not being conducted, such as weekends and holidays.

c. Unpaved Roads and Parking Areas:

(i) Dust from all new unpaved roads and parking areas which exceed 100 vehicles per day averaged over any three consecutive days shall be controlled to the same degree as paving would achieve control.

(ii) Effective one (1) year from the effective date of this regulation, dust from all existing unpaved roads or parking areas which exceed 165 vehicles per day averaged over any three consecutive days shall be controlled to the same degree as paving would achieve control.

(iii) Effective January 1, 1981, dust from all existing unpaved roads or parking areas which exceed 150 vehicles per day averaged over any three consecutive days shall be controlled to the same degree as paving would achieve control.

(iv) Effective January 1, 1982, dust from all existing unpaved roads or parking areas which exceed 125 vehicles per day averaged over any three consecutive days shall be controlled to the same degree as paving would achieve control.

(v) Effective January 1, 1984, dust from all existing unpaved roads or parking areas which exceed 100 vehicles per day averaged over any three consecutive days shall be controlled to to the same degree as paving would achieve control.

(vi) The Division may require any person owning or maintaining any new or existing unpaved road or parking area to establish the vehicle count for any unpaved road or parking area.

(vii) Section II.D.3.c. is only applicable to new and existing unpaved roads and parking areas within:

Reproduced from
best available copy.

(A) Areas or regions designated as non-attainment for total suspended particulate (TSP); or

(B) Two miles from any city or town having a population in excess of 20,000 people as determined by the latest Federal Census or other available source of population data.

d. Material Transport: No vehicle engaged in the transport of materials which are capable of being or becoming airborne shall allow such material to escape the confines of the vehicle during transport.

e. Surface Mining: Except as provided in clause (vi) hereof, all surface mining activities shall comply with the following:

(1) During the entire period of surface mining, abatement and preventive measures must be applied to all disturbed surface areas. These measures shall also be applied during periods when actual mining activities are not being conducted, such as weekends and holidays.

(ii) Water with chemical additives, or other dust palliative measures, must be applied to all disturbed surface areas to prevent visible transport of fugitive dust off the property of origin until such time as reclamation measures are sufficient to prevent such visible transport of fugitive dust. Any application of chemical additives shall be applied in a manner so as not to harm the ecosystem. Upon application by the source, the Division may exempt such source from the provision of this clause (ii) upon demonstration by the source to the satisfaction of the Division that sufficient water resources are not available in the area to comply with said requirement.

(iii) Water with chemical additives, or other dust palliative measures, must be applied to all haulage roads to prevent visible transport of fugitive dust off said roads.

(iv) On site vehicle speeds shall not exceed 10 m.p.h.

(v) Periods of surface disturbance shall be limited to that time minimally necessary to conduct and complete mining activities.

(vi) Section II.D.3.e. is only applicable to mining activities which disturb a surface area greater than one (1) acre in size.

(vii) For mining activities with projected production greater than 50,000 tons per year, an emission permit for fugitive dust must be obtained through the procedures outlined in Regulation No. 3 and such source must employ best practicable control technology.

f. Blasting: To the extent practicable, all blasting operations shall utilize sequential blasting and any other appropriate abatement and preventive measures to minimize emissions of fugitive dust.

g. Storage of Industrial Process Materials, Mineral Products Storage and Waste Disposal: Must employ best practicable control technology in its operations.

h. Other Sources of Fugitive Dust:

(i) All sources of fugitive dust not specifically described elsewhere in Section II.D. shall not emit, cause to be emitted, or allow visible transport of fugitive dust off the property of origin.

E. Existing Alfalfa Dehydration Plants

1. Until January 1, 1985, no owner or operator of any existing alfalfa dehydration process shall cause or permit emission of particulate matter to be emitted during any consecutive 60 minute period which is in excess of the following:

   a. For process units with process rates of up to 60,000 lbs per hour, the allowable emission shall be determined by the use of the equation:

   $$PE = 4.1 (P)^{0.67}$$

   Where

   PE = Particulate emission rate in lbs. per hour
   P = Process weight rate in tons per hour

   b. For process units with process rates of greater than 60,000 lbs. per hour, the allowable emission rate shall be determined by the use of the equation:

   $$PE = 22.44 (P)^{0.17}$$

   Where

   PE = Particulate Emission rate in lbs. per hour
   P = Process weight rate in tons per hour

   c. If two or more process units are connected to the same opening, the maximum allowable emission rate shall be computed by summing the individual emission rates.

2. After January 1, 1985, no owner or operator of an existing alfalfa dehydration plan shall cause or permit emission of particulate matter to be emitted during any consecutive 60 minute period which is in excess of the following:

a. For process units with process weight rates of 60,000 lbs. per hour, the allowable emission shall be determined by the use of the equation:

$$PE = 3.59 (P)^{0.62}$$

Where

PE = Particulate emission in lbs. per hour
P = Process weight rate in tons per hour

b. For process units with process rates of greater than 60,000 lbs. per hour, the allowable emission rate shall be determined by the use of the equation:

$$PE = 17.31 (P)^{0.16}$$

Where

PE = Particulate emission in lbs. per hour
P = Process weight rate in tons per hour

3. Performance Tests:

a. The Division may require the owner or operator of an existing alfalfa dehydration process to conduct performance tests, in accordance with those procedures specified by Section II. C. of the Common Provisions Regulation to determine compliance with this subsection of this regulation.

III. EMISSIONS STANDARDS FOR EXISTING IRON AND STEEL PLANT OPERATIONS

A. Coke Ovens

1. Charging

a. Performance Standard

(i) Emissions from the charging operation shall be limited to a total of 55 seconds of any visible emissions accumulated over five (5) consecutive charges.

(ii) In the event that charging is normally accomplished with a larry car equipped for sequential staged charging, a manually operated larry car may be retained for use in emergency situations. In order to minimize such situations, simultaneous routine maintenance shall not be scheduled for all larry cars equipped for sequential staged charging, and a record of the use, duration, and reason for use of the conventional system shall be maintained. Visible emissions shall be minimized to the extent reasonably possible while a convention larry car is in use.

b. Procedure

(i) To determine compliance with the charging performance standard, the following inspection procedure shall be used:

(A) The observer shall be positioned on the topside of a coke oven battery so that the observer shall have a good view of all of the charging holes of the oven being charged (approximately five to ten oven widths away). During the charging period, the observer shall observe the entire charging system, including the charging holes and larry car hoppers. Upon observing any visible emission from any of these sources, an "accumulative" stopwatch is started. The watch is stopped when all emissions stop and is restarted when additional emission appear. The observer shall continue this procedure for the entire charging period. The charging period begins when the first slide gate is opened and ends when the last charging hole lid is replaced.

Reproduced from
best available copy.

Emissions may occur simultaneously from several points during a charge, e.g., from around all drop sleeves at the same time. in this case, the emissions shall be timed collectively. In addition, emissions may start from one source immediately after another source stops. This shall be timed as one continuous emission. The following emissions shall not be timed:

(1) Visible emissions from burning coal spilled on top of the oven or oven lid during charging.

(2) Visible emissions emitted from any equipment other than the charging system or charging holes of the oven being charged.

(3) Visible emissions emanating from one source which has already been timed as a visible emission from another source; e.g., drop sleeves and charging hopper.

(4) When recording charging emissions, the time recorded on the stopwatch shall be the total time that emission was observed during the charge. The number of seconds that visible emissions were observed shall be recorded on the worksheet.

2. Coke Oven Pushing

a. Pushing emissions shall be considered to be those emissions which occur from the time that the pusher ram begins to move coke into the quench car until the quench car enters the quench tower, but shall not include push side emissions.

b. Performance Standard -

(i) Pushing emissions shall not exceed the following:

(A) Emissions from gas cleaning devices shall not exceed a mass emission rate of 0.03 pounds of filterable particulates per ton of coke pushed, measured by the front half of EPA method 5 (40 CFR 60.275, and Appendix A of Part 60) or its equivalent.

(B) Visible emissions from the gas cleaning devices and from any uncaptured pushing emissions shall not exceed 20% opacity at any time, measured by EPA Method 9 (40 CFR Part 60, Appendix A (1977)), excluding Section 2.5 and the sentence of Section 2.4 reading a minimum of 24 observations shall be recorded.

c. When the emission control system utilized consists of one or more enclosed coke guides and enclosed one-spot quench cars equipped with trailer mounted exhaust and gas cleaning systems, conventional quench cars and equipment may be retained for use in emergency situations when all of the enclosed quench car units are not operational or when one enclosed quench car unit is not operational and the use of the other for all batteries is not feasible. In order to minimize such situations, simultaneous routine maintenance shall not be scheduled for the units, and commencing October 15, 1979, a record of the use, duration, and reason for use of the conventional system shall be maintained. Visible emissions shall be minimized to the extent reasonably possible while such conventional quench cars and equipment are in use.

3. Topside Emissions: Offtakes

a. An offtake is defined as the apparatus for each oven that provides a passage for gases from the oven to the collection main, including all parts of the standpipe, standpipe cap, and gooseneck assembly from the base of the standpipe to the interface with the collection main.

(i) Performance Standard:

(A) Visible emissions shall not occur from more than 6% of total number of offtakes at the coke plant, as measured by the following procedure:

(1) The observer shall make the observation from the topside of the coke batteries, traversing the batteries near the centerline. During the traverse, the observer may stray from the centerline of the battery if the observer believes that an investigation is required to determine whether or not a leak exists.

(2) In performing a traverse, the observer observes offtake leaks on both sides of the batteries traversing in one direction. One or more leaks from a single offtake shall be counted as one leak. The offtake system leak traverse is conducted in the direction where the sun is most directly behind the observer's back. The observer traverses the coke plant at a steady pace, pausing only to make appropriate entries on the data sheet. The time of the start and end of each traverse shall be recorded on the data sheet. If for some reason, the centerline can not be used to provide a clear view of the offtakes, the observer shall select a viewing location on the topside farther from the offtakes being inspected.

(3) The observer records on the data sheet the number of any offtake (e.g., pusher side, oven 1, Battery B) which is observed to have any visible emission emanating from any part of the offtake and whether the leak was from a cap or other part of the offtake involved.

(4) The following visible emissions are not recorded:

(a) Steam vapor; or

(b) Coal smoldering on the topside; or

(c) Visible emissions from flue caps.

(5) In computing the offtake leak percentage, no offtake shall be included in the numerator and demoninator if:

(a) The oven to which it is attached is the most recently charged oven on a coke battery, or

(b) The oven to which it is attached is dampered off from the collection main, proveded that standpipes open for this purpose have been ignited within two minutes after being opened, or

(c) The standpipes are open for the purpose of burning out of carbon. This exclusion shall be limited to one-half hour after the oven is pushed.

4. Topside Emissions: Charging Hole Lids

a. Performance Standard for Larry Car Charged Coke Ovens:

(i) Each coke oven charged with a larry car will have charging holes which are covered by lids during the coking cycle. Visible emissions from the charging hole lids shall be limited to 2% of the total number of such lids at the coke plant, measured by the following procedure.

b. Procedure:

(i) The observer shall make the observation from the topside of the battery, traversing the top of the ovens near the centerline. During the traverse, the observer may stray from the centerline of the battery if the observer believes that an investigation is required to determine whether or not a leak exists.

Reproduced from best available copy.

(ii) The observer shall traverse the coke battery at a steady pace, pausing only to make appropriate entries on the data sheet. The time of the beginning and the ending of the traverse shall be recorded on the data sheet. If for some reason, the centerline can not be used to provide a clear view of the charging hole lids, the observer shall select a viewing location on the topside farther from the charging hole lids being inspected.

(iii) During any one traverse, the observer shall record on the data sheet the identity of each charging hole lid (i.e., oven, battery, lid) which is observed to have any visible emission.

c. The following visible emissions shall not be recorded:

(i) Steam vapor; and

(ii) Coal smoldering on the topside.

5. Combustion Stacks

a. Performance standard

(i) Visible emissions from each combustion stack shall not exceed 20% opacity at any time, measured by EPA Method 9 (40 CFR Part 60, Appendix A (1977)), excluding Section 2.5 and the sentence in Section 2.4 reading "A minimum of 24 observations shall be recorded."

(ii) The mass emission rate for each combustion stack shall not exceed 0.03 grains per dry standard cubic foot, measured by the front half of EPA Method 5 (40 CFR 60.275, and Appendix A of Part 60) or its equivalent.

6. Coke Oven Doors

a. Performance Standard

(i) From the date of this regulation until July 1, 1979, visible emissions from coke oven doors at a coke plant shall not be emitted from more than 10% of the total number of oven doors, plus 3 doors (10% x observed operating doors + 3).

(ii) On and after July 1, 1979, visible emissions from coke oven doors at a coke plant shall not be emitted from more than 7% of the total number of observed operating oven doors, plus 3 doors (7% x observed operating doors + 3).

b. Procedure

(i) For the purpose of ascertaining coke oven door leaks, the following inspection procedure will be followed:

(A) Each oven shall be considered to have two doors. A chuck door shall be considered an extension of the pusher side door, and a leak in either or both shall be considered one leak.

(B) A coke oven door inspection shall consist of an observer walking completely around the coke batteries at a steady pace from a ground-level position just outside the pusher machine and quencher car tracks as close to the batteries as safety and visibility conditions permit. The observer shall traverse each side of the batteries expeditiously, recording the time of the beginning and end of each side's traverse, and the identity of each door having a visible emission. A complete inspection of doors should not exceed thirty minutes.

(C) A visible emission on an individual door shall be noted when the observer determines that any visible emission is emanating from any location on the perimeter of a door or chuck door, but not when emissions are seen to come from the area

Reproduced from
best available copy.

between a buckstay and adjacent jamb. Emissions observed at the top of the battery above a specific door, but not clearly attributable to the door shall not be counted.

(D) An observer shall observe each door only once, scanning the perimeter for any visible emissions. After a brief scan of a door, the observer shall move along his traverse, checking subsequent doors in the battery in a like manner. If a temporary machine obstruction occurs, blocking the view of a series of ovens, the ovens shall be bypassed and the remaining doors on that side of the batteries inspected. After a traverse is made on one side of the batteries, the observer shall expeditiously reobserve any initially blocked doors recording any visible emissions from these doors. Reobservation shall occur only once per side. The observer shall then go directly to the opposite side of the batteries and proceed to perform a like traverse repeating the above procedures. The observer shall record and number of operating oven doors observed on each side of the coke oven batteries and shall also record the total number of operating oven doors observed on both sides of the coke oven batteries.

7. The following facilities and operations shall be subject to the performance standards indicated:

a. Leveler Bars

(i) All leveler bars will be equipped with a smoke boot which will be maintained in good repair.

b. Spooning of Gas Mains

(i) Spooning tools and spooning procedures will be designed and operated to minimize emissions. Spooning bars will be equipped with a mechanical seal to limit the opening into the main during spooning operations. Openings on the main will be closed immediately upon completion of the spooning operation.

c. Bench Cleanup

(i) All coke dragback from an oven just pushed may be immediately shoveled into the empty oven and the bench cleanup may be placed into spillage boxes.

d. Top Cleanup

(i) Coal spillage and cleanup on top of the battery, or tar and pitch which have been removed from pitch traps, shall be placed into a charged coke oven in an expeditious manner so as to minimize visible emissions, providing the following operating procedures are followed.

(A) All exterior openings to the ambient air are closed except for the one charging hole through which the cleanup material is introduced into the oven.

(B) The coke oven is under full aspiration during the time this material is being introduced into the oven.

e. Door Removal for Pushing

(i) Door plugs will be maintained in order to minimize emissions occurring when oven doors are removed prior to pushing the oven.

B. Blast Furnaces

1. The following blast furnace facilities and operations shall be subject to the following performance standards:

1. Backdraft Stacks

(i) Visible emissions shall be kept to a minimum by backdrafting only when necessary to take the furnace off-line.

2. Blast Furnace Bleeders

   a. A blast furnace slip is defined as a sudden movement of the burden which results in an increase in top pressure which causes a sudden emission of gas containing particulate matter from the bleeders. Slips shall be individually recorded as upset conditions in a daily log. Copies of this log shall be submitted to the Air Pollution Control Division on a weekly basis.

   b. The bleeders at the top of the blast furnace shall be maintained so as to prevent visible emissions when the pressure is less than 100 inches of water or such other pressure as shall be set forth in the permit issued by the Division authorizing the construction of a new facility.

   c. Any clean gas bleeder after a scrubber shall be maintained so as to prevent visible emissions when the pressure is less than 22 inches of water or such other pressure as shall be set forth in the permit issued by the Division authorizing the construction of a new facility.

3. Relief Valves on the Double Bell Apparatus

   a. Relief valves on the double bell apparatus shall be opened only as necessary to charge the furnace.

4. Charging Hoppers

   a. The skip dump angle will be maintined so as to minimize emissions from the charging hoppers.

5. Cast House Operations

   a. In order to minimize emissions from the cast house during casting and flushing operations, the operating and maintenance procedures shall be as specified by the Division with concurrence of the Commission.

C. Basic Oxygen Furnace

1. Definitions

(i) "Steel Production Cycle" means the operations required to produce each batch of steel and includes the following major functions: Scrap charging, preheating (when used), hot metal charging, primary oxygen blowing, additional oxygen blowing (when used) and tapping.

2. Standard for Particulate Matter.

(i) Emissions from the BOF during the production cycle shall be controlled to meet the following standards:

(A) Visible emissions from the gas cleaning device shall not exceed 20% opacity at any time, measured by EPA Method 9 (40 CFR Part 60, Appendix A (1977)), excluding Section 2.5 and the sentence of Section 2.4 reading "A minimum of 24 observations shall be recorded."

(B) Emissions from the gas cleaning devices shall not exceed a mass emission rate of 50 mg/dscm (0.022 gr/dscf) of filterable particulate as measured by the front half of EPA Method 5 (40 CFR 60.275, and Appendix A of Part 60) or its equivalent.

REGULATION NO. 3

Regulation Requiring Air Pollutant Emission Notices, Emission Permits and Fees

I. APPLICABILITY

The provisions of this regulation shall apply statewide.

II. AIR POLLUTANT EMISSION NOTICE REQUIREMENTS

A. General

Except as specifically exempted in Subsection II. C. no person shall permit emission of air pollutants from, or construction or alteration of, any facility, process, or activity from which air pollutants are, or are to be, emitted unless and until an Air Pollutant Emission Notice (APEN) has been filed with the Division with respect to such emission. Each such notice shall specify the location at which the proposed emission will occur, the name and address of the persons operating and owning such facility, the nature of such facility, process or activity, an estimate of the quantity and composition of the expected emission and other information as required in the current APEN form. The expected emissions shall be based upon actual test data or, in the absence of such data upon estimations acceptable to the Division. The Division shall make available at all air pollution control authority offices appropriate forms on which the information required by this section shall be furnished.

B. Revised APENs

1. A revised Air Pollutant Emission Notice shall be filed:

   a. Annually if a significant change in emissions has occurred, or

   b. Whenever there is a change in the owner or operator of any facility, process or activity, or

   c. Whenever the location of a portable facility, process, or activity is changed and it is to be operated at the new location for at least thirty (30) days.

2. "Significant Change, " for the purposes of this subsection B. means:

a. the emission of any air pollutant not reported on the APEN on file with the Division, or

b. a change in actual emissions of at least fifty (50) tons per year of any air pollutant from any facility, process, or activity with allowable emissions of more than one-thousand (1,000) tons per year of any one pollutant, or

c. a change in actual emissions of at least ten (10) tons per year of any air pollutant from any facility, process, or activity with allowable emissions of more than one-hundred (100) tons per year but not more than one-thousand (1,000) tons per year of any one pollutant, or

d. a change in actual emissions of at least five (5) tons per year or fifteen (15) percent, whichever is less, of any air pollutant from any facility, process, or activity with allowable emissions of one-hundred (100) tons per year or less of any one pollutant.

C. Exemptions from APEN Requirements

1. The following sources are exempt from the requirement to file APENs because by themselves, or cumulatively as a category, they are deemed to have a negligible impact on air quality.

   a. Air conditioning or ventilating systems not designed to remove air pollutants generated by or released from other processes or equipment.

   b. Fireplaces used for recreational purposes, inside or outside.

   c. Fires used for non-commercial cooking of food for human consumption.

   d. Flares used to indicate danger to the public.

   e. Agriculture operations normally conducted at the farm or ranch including, for example, cultivating and harvesting. This shall not include grain elevator operations, feed mill operations or other post-harvesting activities normally not conducted on the farm or ranch.

f. Construction or alteration of residential structures, including all buildings or other structures used primarily as a place for residence.

g. Experimental laboratory equipment.

h. Disturbance of surface areas which do not exceed 25 contiguous acres and which do not exceed six (6) months in duration.

i. Fuel burning equipment, other than smokehouse generators, which use gaseous fuel at an input rate of less than 750,000 BTU per hour.

j. Upon written request by an owner or operator other sources of minor significance as determined by the Division provided that such sources meet all of the following requirements:

  (i) Uncontrolled emissions from the sources would have a negligible impact on air quality; and

  (ii) Uncontrolled emissions from the source are not toxic or hazardous in nature such as to cause or result in concentrations hazardous to health in any area to which the general public has access; and

  (iii) Uncontrolled emissions from the source will not cause or contribute to ambient concentrations of any pollutant in any attainment or unclassifiable area which would result in exceeding the maximum allowable increase in concentration (increment) or the applicable ambient air quality standard for such pollutant; and

  (iv) Uncontrolled emission from the source will not interfere with reasonable further progress toward the attainment and maintenance of the applicable ambient air quality standard for such pollutant in any nonattainment area.

2. Sanding of streets and roads to abate traffic hazards caused by ice and snow.

III. GENERAL REQUIREMENT FOR EMISSION PERMITS

A. General Considerations

1. Except where specifically authorized by the terms of this Regulation No. 3, no person shall construct or modify any building, facility, structure, or installation, or install any machine, equipment, or other device, or commence the conduct of any such activity, or commence performance of any of the same which will or do constitute a new stationary source without first obtaining or having a valid permit therefor from the Division.

2. Any permit which has been issued pursuant to a prior regulation of the Commission, with respect to a project or the operation thereof, shall continue in full force and effect for the purpose for which it was originally issued.

3. Any orders or decisions of the Division shall be final upon issue.

B. Transfer or Assignment of Ownership

If transfer or assignment of ownership or operation of a permitted air contaminant emission source is anticipated, the prospective owner or operator shall apply to the Division on Division supplied forms for reissuance of the existing permit. The permit shall be reissued upon completion of the transfer or assignment if the applicant certifies that no change is contemplated which might constitute a new or modified air pollution source. In no event shall the new owner or operator of a source which was subject to the requirements of these regulations prior to the transfer or assignment be relieved of the obligation to comply with such requirements by reason of a transfer.

C. Portable Sources

A permitted portable source (e.g., asphalt plants, crushers, etc.) shall have its emission permit number permanently and prominently displayed on each major component of equipment that is a part of that portable source.

D. Exemption from Permit Requirements

1. The following sources are exempt because by themselves, or cumulatively as a category, they are deemed to have a negligible effect on air quality:

a. Those sources exempted from the filing of APENs in Section II. C. of this regulation except that for the purposes of this section, the exemption for residential structures shall be limited to single-family residential dwellings.

b. Commercial laundries (except dry cleaners) which do not burn liquid or solid fuel.

c. Stationary Internal Combustion Engines:

(i) in ozone non-attainment areas if the rated horsepower is less than 250

(ii) in all other areas if the rated horsepower is less than 1,000.

(iii) where in a. and b. above the horsepower exceeds the listed limitations but is used for emergency power generation only and does not operate more than 250 hours per year.

d. Construction or alteration of single family residential dwellings, including home heating devices.

e. Other sources of minor significance as determined by the Division in accordance with Section II. C. 1. j. of this regulation.

2. Sanding of streets and roads to abate traffic hazards caused by ice and snow.

3. New indirect sources are exempt until a permit regulation specific to indirect sources is promulgated by the Commission

4. The provisions of this subsection III. D. do not exempt open burning operations, agricultural or otherwise, from the permit requirements of Commission Regulation No. 1.

IV. EMISSION PERMIT REVIEW PROCEDURES

A. Option for Pre-Application Meeting

Prior to submitting an application for a permit an applicant may request and, if so requested, the Division shall grant, a pre-application meeting with the applicant. At such meeting, the Division shall advise the applicant of the applicable permit requirements, including the information, plans, specifications and the data required to be furnished with the permit application.

B. Application for an Emission Permit

1. An application for an Emission Permit shall be prepared on forms currently supplied by the Division.

2. Applications shall be signed by a person legally authorized to act on behalf of the applicant. The applicant shall furnish all information and data required by the Division to evaluate the permit application and to make its preliminary analysis in accordance with Section IV. B. 4.

3. An application for an Emission Permit will not be deemed to be complete until all information and data required to evaluate the application have been submitted to the Division. Within twenty (20) calendar days after the receipt of an application or any supplemental information timely requested by the Division, the Division will give notice to the applicant if and in what respect the application is incomplete. If the Division fails to notify an applicant that its application is incomplete within twenty (20) calendar days of receipt of the original application or receipt of the requested supplemental information, the application shall be deemed to have been complete as of the day of receipt by the Division of the application or the last submitted supplemental information, whichever is later.

4. Within sixty (60) calendar days after receipt of a complete permit application the Division shall prepare its preliminary analysis. The preliminary analysis is to allow the Division to determine whether the new source will, at date of commencement of operation, comply with:

    a. all applicable emission control regulations,

    b. applicable regulations for the control of hazardous pollutants

    c. requirements of the attainment program (IV. D. 2. and IV. D. 3. b.)

    d. National Ambient Air Quality Standards (NAAQS) or, where no NAAQS have been established for the pollutant(s), applicable State Ambient Air Quality Standard(s).

The preliminary analysis shall indicate what impact, if any, the new source will have (as of the projected date of commencement of operation) on all areas (Attainment, Non-attainment, Unclassifiable), within the probable area of influence of the proposed source. If so requested on the permit application form, a copy of this preliminary analysis shall be forwarded to the applicant postmarked no later than fifteen (15) calendar days after the completion of the preliminary analysis.

When the preliminary analysis includes modeling, the model used shall be an appropriate one given the topography, meteorology and other characteristics of the region which the source will impact. The model should also meet EPA requirements if possible.

C. Public Comment Required.

1. Except as provided in Section IV. C. 3., the following sources are subject to public comment:

   a. Sources with projected controlled annual emissions of any pollutant for which an ambient air quality standard has been designated, where such emissions will be greater than twenty-five (25) tons per year.

   b. Sources of non-attainment pollutants (or their precursors) proposing to locate or to operate in non-attainment areas.

   c. Sources for which preliminary analysis indicates a possible violation of Commission Regulation No. 2 (odor emissions).

   d. Sources of pollutants which are regulated under Air Quality Control Commission Regulation No. 8 or which are otherwise "Hazardous Air Pollutants" as defined in the Act (C.R.S. 1973, 25-7-103(13)).

2. When an application warrants public comment, the Division shall, within fifteen (15) calendar days after the preparation of the preliminary analysis, cause public notice of the application to be published in a newspaper of general distribution in the area in which the proposed project or activity is, or will be, located, and a copy of the preliminary analysis and application to be filed with the county clerk(s) for the county(s) in which the source is or will be located. Such notice shall state:

a. The location and nature of the proposed activity or project for which an emission permit application has been filed.

b. The locations where the application and preliminary analysis are available for public inspection.

c. That comments concerning the ability of the proposed project or activity to comply with the applicable standards and regulations of the Commission are solicited from any interested person.

d. That the Division will receive and consider public comments for thirty (30) calendar days after such publications.

3. Sources may be exempted from public comment requirements by the Division if they are of six (6) months duration or less. In making such an exemption determination, the Division shall take into consideration the duration of the operation, its location, the nature and projected amount of emissions, anticipated public concern, and other relevant considerations.

D. Emission Permit Review Requirements

1. Requirements applicable to all permit applications.

Within thirty (30) calendar days following the completion of the Division's preliminary analysis for applications not subject to the public comment, or within thirty (30) calendar days following the period for public comment for applications subject to public comment, the Division shall grant the permit if it finds that:

a. The proposed source or activity will meet all applicable emission control regulations and regulation for the control of hazardous air pollutants contained in the State Implementation Plan;

b. The proposed source or activity will meet the applicable requirements of the attainment program as outlined in Section IV. D. 2. and IV. D. 3. b., if any;

c. The proposed source or activity will not cause an exceedance in any attainment area of any NAAQS; and

d. Where no NAAQS has been established for a particular pollutant, the proposed source or activity will meet all applicable regulations and will not interfere with attainment and maintenance of any applicable State Ambient Air Quality Standard.

PROVIDED HOWEVER, that the Division shall not deny a permit for failure of the proposed source to meet any applicable requirement of the State Implementation Plan where (1) there is pending an application for a revision to the SIP pursuant to C. R. S. 1973, 25-7-305 (Alternative Emission Reduction) which, if adopted, would require the Division to grant the permit and (2) the applicant waives the time constraints on the Division to act on its application until the Board or the Commission has issued its final decision on the request for a SIP revision and EPA has acted on the proposed revision to the SIP. In such circumstances, the Division shall delay its decision on the permit application until after final action on the request for revision of the SIP (including action by EPA).

2. Requirements Applicable to Non-Attainment Areas (Attainment Program)

a. Major Stationary Sources.

For any new major stationary source or major modification where the projected emissions would cause or contribute to ambient concentrations exceeding a NAAQS, the Division shall grant a permit if it determines that the following conditions, as well as those in paragraph IV. D. 1., will be met:

(i) The proposed source will achieve the lowest achievable emission rate (LAER) for the specific source category.

(ii) The applicant has certified that all other existing major stationary sources owned, operated, or controlled by the applicant (or any entity controlling, controlled by, or under the common control with the applicant) in Colorado are in compliance with the requirements of the State Implementation Plan or are subject to and in compliance with an enforceable compliance schedule.

(iii) Prior to the date of commencement of operations, emission reductions (offsets) greater than one for one must be obtained from existing sources within the non-attainment area for each pollutant, or its precursors, for which the area is non-attainment.

Offsets must represent reasonable further progress towards attainment of the NAAQS when considered in connection with other new and existing sources of emissions. In addition, offsets for total suspended particulates, sulfur oxides, and carbon monoxide must show, through atmospheric simulation modeling, a positive net air quality benefit in the area affected by the emissions. Provided, however, that offsets meeting the requirements of this section (iii) may also be obtained from existing sources outside the non-attainment area if the applicant demonstrates:

(A) a greater air quality benefit may thus be achieved; or

(B) sufficient offsets are not available from sources within the non-attainment area.

With respect to offsets obtained from outside the non-attainment area, the Division may increase the ratio of the required offsets to new emissions the greater the distance such offsets are from the new or modified source.

(iv) For those sources proposing to locate in non-attainment areas for ozone or carbon monoxide (or both) and the source has the potential to emit in excess of 100 tons/yr. of carbon monoxide or volatile organic compounds, the permit application shall include an analysis of alternative sites, sizes, production processes and environmental control techniques for such proposed source which demonstrates that benefits of the proposed new source significantly outweighs the environmental and social costs imposed as a result of its location, construction, or modification.

(v) Offsets for which emission reduction credit is taken must be enforceable through permit conditions or source specific SIP revisions.

b. Major Modifications

For the purpose of determining whether a modification subjects a source in a non-attainment area to the requirements of Regulation No. 3, Section IV. D. 2. a., "major modification" means: any physical change in or change in the method of operation of a major stationary source, or series of contemporaneous physical changes in or changes in the method of operation of a major stationary source, that would result in a significant net increase in the stationary source's potential to emit the pollutant for which the stationary source is major (or that would make the stationary source major) taking into account all accumulated net increases in potential emissions occurring at the stationary source since December 21, 1976 or since the last major modification subject to these provisions, whichever is later. The following provisions shall apply:

(i) A physical change shall not include routine maintenance, repair, or replacement.

(ii) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

(A) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(B) An increase in the hours of operation;

(C) Use of an alternative fuel or raw material by reason of an order in effect under sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), a prohibition under the Power Plant and Industrial Fuel Use Act of 1978 (or any superseding legislation) or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act;

(D) Use of an alternative fuel or raw material, if prior to December 21, 1976, the source was capable of accommodating such fuel or material;

(E) Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;

(F) Change in ownership of the source;

(H) Use of refuse-derived fuel generated from municipal solid waste.

(iv) An increase in the sulfur dioxide emission rate which results from the addition of new emission control equipment to an existing source in an attainment area for sulfur dioxide shall be excluded in determining whether a major modification will occur if there is no increase in the emission rate of pollutants other than sulfur dioxide and if the resulting sulfur dioxide emissions are within Federal and State sulfur dioxide emission standards for existing sources.

(v) Except as otherwise provided, a net increase shall be considered "significant" if it causes an increase in net emissions that equals or exceeds the following amounts:

Carbon Monoxide (CO): 100 tons per year
Oxides of Nitrogen (NOx): 10 tons per year
Total Suspended Particulates (TSP): 10 tons per year

Sulfur Dioxide (SO_2): 10 tons per year
Ozone (O): 10 tons per year of volatile organic compounds
Lead (Pb): 1 tons per year

Provided, however, that for the purpose of this regulation the amounts required for a net increase to be considered significant shall be increased to, but not exceeding, the following amounts to correspond with any increases hereafter promulgated by EPA:

Carbon Monoxide: 100 tons per year
Total Suspended Particulates: 25 tons per year
Sulfur Dioxide: 40 tons per year
Ozone: 40 tons per year of volatile organic compounds
Oxides of Nitrogen: 40 tons per year
Lead: 1 ton per year

(vi) For a series of changes in a stationary source to satisfy the requirement of "no net increase," all of the following must be satisfied:

(A) All reductions and all increases must be for the same pollutant;

(B) The sum of all decreases must be greater than or equal to the sum of all increases; and

(C) On balance the air quality of the affected area must not be adversely impacted

(vii) In performing the calculation in section IV. D. 2. b. (vi)(B) (to determine whether the sum of all decreases is greater than or equal to the sum of all increases) the following rules shall apply:

(A) Subject to the following adjustments, the size of an increase or decrease is determined by the difference between the potential to emit of the changed emission unit before and after the change.

(B) If potential to emit for a changed emission unit was initially higher than allowable emissions, then no offset credit may be taken for decreasing potential to emit down to allowable emissions (e.g., no credit may be taken for reduction of emissions of VOC as a result of application of RACT to the source as required by Commission Regulation No. 7).

(C) With respect to the amount of credit permissible for changing fuels and for replacing a VOC with another of lesser reactivity, the following requirements apply:

(1) Combustion of fuels. Generally, the emissions for determining emission offset credit involving an existing fuel combustion source will be the allowable emissions under the SIP for the type of fuel being burned at the time the new source application is filed (i.e., if the existing source has switched to a different type of fuel at some earlier date, any resulting emission reduction (either actual or allowable) shall not be used for emission offset credit). If the existing source commits to switch to a cleaner fuel at some future date, emission offset credit based on the allowable emissions for the fuels involved is not acceptable unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emission reduction should the source switch back to a dirtier fuel at some later date. The Division shall ensure that adequate long-term supplies of the new fuel are available before granting emission offset credit for fuel switches.

(2) Credit for VOC substitution. Since almost all non-methane VOCs are photochemically reactive and low reactivity VOCs eventually form as much photochemical oxidant as highly reactive VOCs, no emission offsets credit may be allowed for replacing one VOC with another of lesser reactivity except for replacement with one of the following:

Methane
Ethane
1.1.1.-Trichloroethane (Methyl Chloroform)
Trichlorotrifluoroethane (Freon 113)
Methylene Chloride

(viii) For credit to be given for any reduction in potential to emit resulting from a physical change in or change in operation of a major stationary source or as a result of a series of contemporaneous physical changes in or changes in the method of operation of a major stationary source, an APEN reporting such reduction must be filed within ninety (90) days after the effective date of this regulation or within ninety (90) days after the reduction occurs, whichever is later. Such reductions must be enforceable through permit conditions or source specific SIP revisions.

(ix) PROVIDED HOWEVER, that with respect to sources locating in non-attainment areas without an approved implementation plan or a plan which is "incomplete" the net increase shall be determined only with respect to increases and decreases that have occurred at the particular piece of process equipment which has been modified. (i.e., the "bubble concept" shall be applied only to the individual piece of process equipment (facility) rather than to the entire stationary source.) As used herein, "incomplete" means any plan where approval under Part D of Title I of the Federal Act is conditioned on submission of additional material by the State; any plan containing State-adopted schedules for submission of additional material required under Part D; and any plan where additional submissions are needed by July 1, 1982, as required by Section 129(c) of the 1977 amendments to the Federal Act.

c. Exemptions from Certain Non-attainment Area Requirements:

(i) The following are exempt from the major stationary source criteria of IV. D. 2(a)(iii).

(A) Portable sources which will relocate outside a non-attainment area in less than one (1) year.

(B) Each pilot plant that operates an aggregate of less than six (6) months.

(C) Construction phases of a new or modified building, facility, structure, or installation. These may, at the discretion of the Division, exceed a period of one (1) year.

(D) Other temporary processes or activities of less than one (1) year duration.

(E) Sources undergoing fuel switches as required by federal order or through lack of an adequate fuel supply if the Division determines that:

(1) The applicant has used his best efforts in seeking the required emission offsets but was unsuccessful;

(2) All available emission offsets were obtained;

(3) The applicant will continue to seek emission offsets as they become available.

(F) Resource recovery facilities burning municipal solid waste for the purpose of producing heat energy, providing they meet the requirements of Section IV. D. 2. c. (i)(E) and that they utilize solid waste to provide more than 50% of the heat input.

(ii) Major sources locating in a clean portion of a non-attainment area (or which will be a clean portion as of the commencement of operation) are exempt from the requirements of Section IV. D. 2. a. (i) through (v) if:

(A) The source applies reasonably available control technology, and

(B) The applicant demonstrates through appropriate analysis, monitoring data, or air quality modeling that the allowable emissions from the source (not including any emission reduction offsets achieved elsewhere in the source) would not cause the following significance levels to be exceeded in the actual area of non-attainment:

TABLE OF SIGNIFICANCE LEVELS

Pollutant	Averaging Time				
	Annual	24-Hour	8-Hour	3-Hour	1-Hour
SO_2	1.0 ug/m^3	5 ug/m^3		25 ug/m^3	
TSP	1.0 ug/m^3	5 ug/m^3			
NO	1.0 ug/m^3				
CO			500 ug/m^3		2000 ug/m^3

The applicant shall bear the burden of proof that the source is locating in a clean portion of a non-attainment area, but in any case, exemptions do not apply to major sources of hydrocarbons locating in an ozone non-attainment area.

d. Minor Sources

For minor sources where the emission would cause or contribute to ambient concentrations which exceed a National Ambient Air Quality Standard in designated non-attainment areas, permits shall be issued if, in addition to determining that the source will meet the requirements of paragraph IV.D.1., the Division determines that Reasonably Available Control Technology (RACT) will be applied and the applicant has adequately demonstrated that reasonable further progress toward the attainment of the National Ambient Air Quality Standards will not be impaired as outlined in the SIP.

3. Requirements Applicable to Attainment Areas

a. General

Until special permit requirements for sources locating in attainment areas are promulgated, all sources locating in such areas will have to meet the requirements of Section IV.D.1. in order to obtain a State emissions permit. Major sources locating in attainment areas may also require a PSD permit from the U.S. Environmental Protection Agency.

b. Major Sources in Attainment Areas Affecting Non-Attainment Areas.

If a new or modified major stationary source is in an attainment area but its emissions will significantly affect ambient air quality in a non-attainment area, sufficient emission reduction must be provided in the non-attainment area to offset that portion of the emissions which affect such non-attainment area. (Offsets may be obtained from outside the non-attainment area as provided in Section IV.D.2. a.(iii) of this regulation.) The source will also meet the requirements of Section IV.D.2.a.(i) and (ii). Air Quality will be deemed to be "significantly affected" if, but for the offsets, the significance levels set forth in the table in Section IV.D.2.c.(ii)(B) would be exceeded in the non-attainment area.

Sources of VOCs locating in attainment areas shall demonstrate to the satisfaction of the Division that they will not affect ozone non-attainment areas or provide offsets as herein required.

Emission offsets for total suspended particulates, sulfur oxides, and carbon monoxide must show, through atmospheric simulation modeling, a positive net air quality benefit in the portion of the non-attainment area affected by the emissions.

E. Permit Terms and Conditions

The Division shall include such terms and conditions in any permit as it deems necessary for the proposed project or activity to qualify for the permit; except that the only terms or conditions of a permit which may be enforced after final approval has been granted are those specifically described in section IV.D. as conditions required to be found for the granting of a permit. All other terms and conditions of the permit shall terminate upon the granting of final approval by the Division pursuant to paragraph IV.H.

F. Time Constraints on Division Action

If the Division fails to grant or deny the permit application within the time prescribed, the permit shall be deemed to have been granted unless the applicant therefor shall have expressly waived such time limitation. The applicant may limit its waiver to a specified length of time or to a specified date.

G. Denial or Revocation of the Emission Permit.

1. If the Division determines that a source cannot comply with the provisions of section IV.D. of this regulation, the Division shall issue its written denial of the permit application stating the reasons for such denial. Any Division denial of an emission permit shall become final upon mailing of the denial notice to the applicant by certified mail. The applicant may appeal the Division's final denial of a permit as provided in paragraph IV.G.3. below.

2. Any applicant for an emission permit shall advise the Division in writing of any refusal to accept any permit condition imposed by the Division within twenty (20) calendar days after receipt of the permit. Such refusal shall be deemed a denial of the permit application.

3. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant may request a hearing before the Air Quality Hearings Board for review of the Division's action. The hearing shall be heard in accordance with the provisions of C.R.S. 1973, 25-7-114(4)(h) and 25-7-119 (Colorado Air Quality Control Act) and C.R.S. 1973, 24-4-105 (State Administrative Procedure Act).

H. Final Permit Approval

1. Unless prior and mutually acceptable arrangements have been made, the applicant shall not commence the operation of a stationary source for which an emission permit has been issued or reinstated without giving notice to the Division, thirty (30) calendar days (fifteen (15) calendar days for portable sources) prior to the date on which commencement will take place.

2. Within thirty (30) calendar days after commencement of operation, the Division shall inspect the source to determine whether or not the operating terms and conditions of the emission permit have been satisfied. However, for major sources with more than one building, structure, facility, piece of equipment or installation which are governed by one permit, the Division may make arrangements with the applicant for phasing of commencement of operation and inspection periods as may be appropriate for such source.

3. Before final approval of the permit is granted, the Division may require the applicant to conduct and pay for performance tests in accordance with methods approved by the Division. The Division may monitor such tests and may, at its expense, conduct its own performance tests.

4. If, prior to final approval, the Division finds the terms or conditions of the permit have been violated, it may revoke the permit or grant a period of not more than six (6) months in which to meet the terms or conditions. The Division may impose reporting or other requirements during such period after commencement of operations. Although no requirements of the State Implementation Plan may be violated during such period, any temporary non-compliance will not be deemed a violation of such requirements provided that:

   a. The Division is notified of the non-compliance as soon as possible, but no later than two (2) hours after the start of the next working day; and

b. Such notice is followed by a written explanation of the cause of non-compliance, and explaining what proper action has been or is being taken to correct the conditions causing the non-compliance, and explaining what proper action is being taken to eliminate or minimize violations until the cause thereof can be remedied.

c. The Division shall revoke the permit if violations continue and it determines the remedial action being taken by the applicant does not represent a good faith effort to correct the non-compliance as expeditiously as possible or that the action being taken will not result in compliance within the period granted.

5. If the Division determines that the terms and conditions of the emission permit have been satisfied, the Division shall issue in writing, its final permit approval to the applicant. Otherwise, the Division shall revoke the permit.

V. BANKING OF EMISSION REDUCTIONS

A. Preserving Emission Reductions

Sources that demonstrate a reduction in emissions which occurs after January 16, 1979, and which exceeds the reductions required by this regulation (offsets) and by other regulations of the Commission may preserve ("bank") such "excess" reductions for sale or use in the future as emission offsets. An owner or operator who desires to preserve such "excess" reductions shall submit a written request for emission reduction credit to the Division identifying the source(s) from which emissions have been reduced, the pollutant(s) involved in the reduction(s) and its (their) chemical and physical characteristics, and the amount of emissions claimed for future offset credit.

1. Where offsets are claimed as in excess of those required for the granting of a permit, the Division shall identify the offset credit allowed on the permit and shall keep appropriate records of any such preserved ("banked") offsets.

2. Where reductions are claimed other than in connection with the granting of a permit, a source specific State Implementation Plan revision shall be required to identify any emission reduction credit. The Board or the Commission, as the case maybe, shall identify the emission reduction credit allowed in the SIP revision and shall notify the Division, which shall keep appropriate records of any such preserved emission reductions.

B. Use and Sale of Emission Reductions

1. Any preserved emission reduction may later be used as an offset to new emissions only to the extent that it could be used if it were being obtained concurrently with the commencement of operations of a new or modified source. (See Section IV. D. 2. (a) (iii) of this regulation).

2. An owner of preserved emission reductions may use or sell such reductions only after proper notice of intent to use or sell them has been given to the Division. Such notice shall be in writing and shall identify the permit(s) and SIP revision(s) in which credit for such emission reductions was preserved; and the sale or use thereof shall not be allowed until such credits have been verified by the Division. The Division shall keep accurate records of the use and sale of any preserved emission reductions and report same, as may be appropriate, to EPA.

VI. FEES

A. General

1. Every person required to obtain an Emission Permit shall pay fees as set forth in the following paragraphs. Such fees shall be charged to recover actual costs incurred by the Division in processing permit applications and issuing permits, to include the reasonable costs of such processing of administration, and of enforcement of the permit provisions. Such costs shall include the cost of predictive model utilization when the use of such models is deemed necessary by the Division for proper evaluation of the permit application. The Division shall maintain a written record of the staff time and other costs incurred in the processing of a permit application. Such fees shall apply without regard to whether a permit is issued or denied.

2. All fees assessed must be received within thirty (30) days of the date of receipt of the written request therefor. Such requests shall be sent by certified mail. All fees collected under this regulation shall be made payable to the Colorado Department of Health. The Emission Permit shall not be issued until all such assessed fees have been paid.

B. Filing Fees

A non-refundable filing fee of $40.00 shall accompany each Air Pollution Emission Notice (APEN) filed with a permit application. Additionally, a filing fee shall be charged for the filing of a revised APEN as provided in subsections D. and E. of this section.

C. Emission Permit Fees

1. Applicants for an Emission Permit shall be assessed total fees which shall be partially determined at the time that the Division makes its decision whether to issue preliminary approval of the Emission Permit and partially at the time the Division makes its decision whether to issue final approval, but in no event shall a fee exceed twenty-five thousand dollars for any and all permits required for an entire contiguous plant site.

2. The partial fee collected at the time the Division makes its decision whether to issue preliminary approval of the permit shall include direct costs associated with the preliminary engineering evaluation, modeling, and analysis of impact on ambient air quality, notice and publication requirements, and such other direct and indirect costs as are required for the aforementioned activities incurred by the Division up to the time of the decision of whether to issue preliminary approval.

3. The final fee collected at the time the Division makes its decision of whether to issue final approval shall include the balance of the total of all direct and indirect costs associated with enforcement of any terms and conditions of the emission permit, the supervision of compliance testing, notice and publication requirements, and such other costs as are required for the processing, issuance, and administration of the permit.

D. Relocation Fee

Where an Emission Permit has been issued for the operation of a portable emission source, a revised APEN giving notice of the relocation shall be filed with the Division each time the source is relocated and shall be accompanied by a $10.00 filing fee. In the alternative, the holder of the emission permit for such a portable source may file a single APEN with a schedule of relocations with the Division and may pay a filing fee equal to $10.00 for each relocation set forth in the schedule.

E. Transfer Fee

A revised APEN shall be filed with the Division along with a filing fee of $10.00 whenever ownership or operation of an air pollution emission source is transferred or assigned.

VII. CONFIDENTIAL INFORMATION OR DATA CONTAINED IN APEN'S OR EMISSION PERMIT APPLICATION

A. Upon written request by any person filing an APEN or an emission permit application, any information or data furnished to the Division in an APEN or Permit Application and determined by the Division to relate to confidential finances or to secret processes, methods of manufacture, or production, shall not be publicly disclosed and shall be kept confidential by all members, officers, and employees of the Board, the Commission, and the Division.

B. If the Division at any time determines that information or data requested to be kept confidential is not entitled to confidential treatment, it shall provide fifteen (15) days written notice of its decision to the owner or operator requesting such confidential treatment prior to making such information or data public. Information concerning the nature and amounts of emissions into the atmosphere shall not be entitled to confidential treatment.

C. A request for confidential treatment of information or data submitted to the Division shall be deemed a limited waiver by the applicant of the time constraints contained in subsection IV.F. of this regulation. Therefore, any delay in the processing of a permit application resulting from the Division's being required to give notice under subsection VII.B. hereof shall not be considered in determining whether a permit shall be deemed to have been granted or denied pursuant to subsection IV.F. of this regulation.

REGULATION NO. 7

Regulation to Control Emissions of Volatile Organic Compounds

I. APPLICABILITY

The provisions of this regulation shall apply only to ozone non-attainment areas with the exception of Section V., paragraphs VI. B. 1. and 2., and subsection VII. C., which apply statewide. Unless otherwise specified, all provisions shall become effective and enforceable on the effective date of this regulation.

II. GENERAL PROVISIONS

A. Definitions

1. "Volatile Organic Compound" (VOC) means any compound of carbon (excluding carbon dioxide, carbon monoxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate), that has a vapor pressure of 0.1 millimeter of mercury (0.1 torr) or greater at standard conditions.

2. "Highly Volatile Organic Compound" is defined as a volatile organic compound or mixture of such compounds with a vapor pressure in excess of 570 torr (11 psia) at 20°C.

3. "Petroleum Distillate" is a volatile organic compound or a mixture including volatile organic compound(s) obtained from petroleum by a process of vaporization and condensation. #6 fuel oil - a residual fuel - is not a petroleum distillate.

4. "True Vapor Pressure (Vapor Pressure)" means Absolute Vapor Pressure.

B. Alternative Compliance Methods for Processes and Operations

For each process specified in Section IX. (Surface Coating) and X. (Use of Solvents for Cleaning), the emission limitations designated for that process shall be achieved by:

1. Use of coatings with proportions of VOC less than or equal to the maximums specified by the applicable subsection of this regulation; or

2. Use of the specified equipment and procedures prescribed by the applicable subsection of this regulation; or

3. Apparatus and/or other technology which controls emissions to give reductions equivalent to those that would be achieved by compliance with paragraphs II. B. 1. or II. B. 2., and which are approved by the Division; or

4. If the source demonstrates to the satisfaction of the Division that it is unable to comply with the requirements of paragraph II. B. 1., or II. B. 2., or II. B. 3., the Division may approve controls which reduce emission of VOC at least 85%. Additionally, if any of the VOC emissions are incinerated at least 90% of the carbon chemically bound in the VOC entering the incinerator must be oxidized to carbon dioxide.

C. Exemptions

Emissions from any source of methane or ethane are exempted from the provisions of this regulation.

D. General Emission Limitation

1. Existing Sources

a. If specific emission limitations are set forth in this regulation for a particular type of source of VOC, such sources shall be subject to such limitations on and after the effective date of such limitations. Prior to the effective date of such specific emission limitations, sources subject thereto shall not emit into the ambient air from any process or point source more than 204 kilograms (450 pounds) per hour or more than 1,361 kilograms (3,000 pounds) per day.

b. For sources of VOC for which no specific emission limitations have been set forth in this regulation, no person shall emit into the ambient air from any process or point source more than 204 kilograms (450 pounds) per hour or more than 1,361 kilograms (3,000 pounds) per day:

In lieu of meeting the daily emission limitations of Section VII.D.1.b. of Air Quality Control Commission Regulation No.7, Coors Container Company may elect to simultaneously operate the 26-inch printing press and the 44-inch printing press which it owns and operates at its Boulder, Colorado paper packing facility so as to comply with the emission limitations which satisfy the following equation:

E26 + E44 = 6000 pounds per day

where E26 is the emission limitation (pounds of VOC per day) for the 26-inch printing press and E44 is the emission limitation (pounds of VOC per day) for the 44-inch printing press; PROVIDED THAT Coors shall be required to maintain accurate records of the amounts of products printed on each press, the types of inks used for such printings, the operation rate of each press for such printings, and the time period for which each press was operated for such printings. Such records shall be kept current and shall be retained for a period of one year after the date of printing shown by the record. The maximum emission from either press shall not exceed 5000 pounds/day of VOC emissions.

c. PROVIDED HOWEVER, that no existing source of VOC emissions employing emission controls on or within the 6-month period preceding the effective date of this regulation may reduce its level of control of VOC emissions below that level of control actually achieved, even though such source may otherwise be subject to less stringent control requirements; except that no existing source shall be required to control emissions to an extent greater than that level of control which RACT would achieve.

2. New Sources

Unless and until a new source of VOC is subject to more specific emission limitations set forth in this regulation, it shall utilize controls representing Reasonably Available Control Technology (RACT) as determined by the Division. In making a determination of what controls represent RACT for a specific source, the Division shall be guided, but not necessarily controlled by, Control Technique Guidelines (CTG) documents published by U.S. EPA. For new sources for which the Division is unable to determine RACT, no person shall emit from any process or point-source more than 204 kilograms (450 pounds) per hour or more than 1,361 kilograms (3,000 pounds) per day.

III. GENERAL REQUIREMENTS FOR STORAGE AND TRANSFER OF VOLATILE ORGANIC COMPOUNDS

A. Maintenance and Operation of Storage Tanks and Related Equipment

All storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

B. Transfer (Excluding Petroleum Distillates)

Except as otherwise provided in this regulation, all volatile organic compounds transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be transferred using submerged or bottom filling equipment which assures 97% submerged filling.

IV. STORAGE OF HIGHLY VOLATILE ORGANIC COMPOUNDS

Highly volatile organic compounds (e.g., propane or butane) shall be stored:

A. In a pressure tank which is at all times capable of maintaining working pressures sufficient to prevent vapor loss to the ambient air; or

B. With methods and/or equipment approved by the Division in writing pursuant to the request of the person owning or operating the storage facility.

V. DISPOSAL OF VOLATILE ORGANIC COMPOUNDS

No person shall dispose of volatile organic compounds by evaporation or spillage if the quantity exceeds:

A. Thirty-eight (38) liters (10 gallons) per day in ozone non-attainment areas.

B. Three-hundred eighty (380) liters (100 gallons per day in ozone attainment areas.

VI. STORAGE AND TRANSFER OF PETROLEUM DISTILLATE

A. General Requirements

No person shall build, install, or permit the building or installation of any rotating pump or compressor handling any type of petroleum distillate unless said pump or compressor is equipped with mechanical seals or other equipment of equal efficiency. If reciprocating-type pumps and compressors are used, they shall be equipped with packing glands properly installed, in good working order, and properly maintained so that no emissions occur from the drain recovery systems.

B. Storage of Petroleum Distillate

1. Exemptions

   a. The following distillates are exempt from the provisions of subparagraphs VI.B.2., and 3. below:

      (i) Diesel Fuels 1-D, 2-D, and 4-D as defined in ASTM D975-78.

(ii) Fuel Oils #1, #2, #3, #4, and #5, as defined in ASTM D396-78.

(iii) Gas Turbine Fuels 1-GT through 4-GT as defined in ASTM D2880-78.

b. The following underground storage facilities are exempt from subpart VI. B. 2. below:

(i) Underground tanks if the annual sum total of the volume of distillate removed from the tank plus the sum of the volume of distillate added to it does not exceed twice the operational volume of the tank; (i.e., a maximum of one turnover per year is allowed).

(ii) Subsurface caverns or porous rock reservoirs.

2. Storage of Petroleum distillate in tanks greater than 151,412 liters (40,000 gallons)

a. All petroleum distillates which have a true vapor pressure greater than 33.6 torr (0.65 psia) at 20°C (or, alternatively, a Reid vapor pressure greater than 1.30 pounds - 67.2 torr) but not greater than 570 torr (11.0 psia) at 20°C, and which are stored in any tank or other container of more than 151,412 liters (40,000 gallons) must at all times meet the following conditions:

(i) The tank must be capable of maintaining working pressures sufficient to prevent organic vapor loss. This may be accomplished through use of a pontoon-type, or double-deck type, floating roof or an internal floating cover which shall rest on the surface of the liquid contents and shall be equipped with a closure seal or seals to close the space between the edge of the floating roof (or cover) and tank walls. All seals shall have no visible tears, leaks, or warpage; or

(ii) A vapor gathering system capable of collecting the petroleum distillate vapors discharged, together with a vapor recovery or disposal system capable of processing such vapors so as to prevent their emission into the atmosphere; or

(iii) Other equipment of equal or greater control efficiency provided the design and effectiveness of such equipment as documented is submitted to and approved by the Division.

b. Above ground storage tanks used for the storage of petroleum distillate shall have all external surfaces coated with a material which has a reflectivity for solar radiation of 0.7 or more. Methods A or B of the most recent revision of ASTM E424 shall be used to determine reflectivity. Alternatively, any untinted white paint may be used which is specified by the manufacturer for such use.

This provision shall not apply to written symbols or logograms applied to the external surface of the container for purposes of identification provided such symbols do not cover more than 20% of the exposed top and side surface area of the container or more than 18.6 square meters (200 square feet), whichever is less.

3. Storage of Petroleum Distillate in Tanks of or less than 151,412 liters (40,000 gallons) capacity

a. Exemptions from this paragraph (VI. B. 3.)

(i) Petroleum distillates with vapor pressure at 20°C of less than 78 torr (1.5 psia); or

(ii) greater than 570 torr (11.0 psia) at 20°C. (These are subject to the more stringent storage requirements of Section IV.)

b. Storage tanks receiving and storing petroleum distillate shall install and operate an approved vapor balance system if the tank:

(i) has a nominal manufacturer's capacity of 2,082 liters (550 gallons) or more and was installed after November 7, 1973, or

(ii) has a nominal manufacturer's capacity of 7,571 liters (2,000 gallons) or more and was installed prior to November 7, 1973.

(iii) A vapor balance system shall be deemed "approved" if its design and operation is in accord with the applicable provisions of appendices A. and B.

C. Transfer of Petroleum Distillate

1. Exemptions

Petroleum distillates with pressures at 20°C of less than 78 torr (1.5 psia) or greater than 570 torr (11.0 psia) shall be exempt from the provisions of this subsection C.

2. Loading Facilities Classified as Terminals

a. A terminal is defined as a petroleum distillate storage and distribution facility that has an average daily throughput of more than 76,000 liters (20,000 gallons), which is loaded directly into transport vehicles.

b. Such facilities must be equipped with proper loading equipment and follow loading procedures listed below:

(i) Dry-break loading couplings to prevent petroleum distillate loss during uncoupling from vehicles.

(ii) A vapor collection and disposal system which gathers vapor transferred from vehicles being loaded. The system will include devices to prevent the release of vapor from vapor recovery hoses not in use.

(iii) It is the terminal's responsibility to assure that vapor recovery equipment be used when tank trucks are being loaded. Loading procedures shall assure that petroleum distillate cannot be loaded unless vapor recovery equipment is in use.

(iv) Provide for the prevention of overfilling of transport vehicles with loading pump shut-offs, set stop meters, or comparable equipment.

(v) Recovery and disposal equipment shall operate at a back pressure less than the pressure relief valve setting of transport vehicles.

(vi) Petroleum distillate shall not be released on the ground from transport vehicles. Provision shall be made to remove any undelivered petroleum distillate with closed drainage devices.

(vii) Final recovery and disposal equipment or devices shall be maintained and operated to emit no more than 80 milligrams of volatile organic compound per liter of petroleum distillate being loaded. Such disposal devices shall be approved by the Division.

Reproduced from best available copy.

3. Loading Facilities Classified as Bulk Plants

a. A bulk plant is defined as a petroleum distillate storage and distribution facility that has an average daily throughput of 76,000 liters (20,000 gallons) or less, which is loaded directly into transport trucks. (As used herein, "bulk plant" does not include service stations nor separate operations within petroleum distillate distribution facilities which pump only into fuel tanks fueling motor vehicles. Both such operations are regulated by paragraph VI. B. 3. of this Regulation.)

b. Bulk storage plants shall install an approved vapor balance system to return vapors to the incoming transport trucks during the filling of tanks controlled under paragraph VI. B. 3. (A vapor balance system shall be deemed "approved" if its design and operation is in accord with the provisions of Appendix B of this Regulation.)

c. Bulk plants which serve storage tanks which are required to collect and recover vapor as prescribed in paragraph VI. B. 3. shall:

(i) Install and operate vapor collection and return equipment on any transport vehicles used to deliver to controlled tanks, and

(ii) Install and operate vapor collection and return equipment at loading facilities to collect vapors during loading of tank compartments of outbound transport trucks and return these vapors to the bulk plant storage tanks, using an approved vapor balance system.

(iii) Transport trucks and loading facilities shall conform to the applicable provisions of C. 2. and C. 4. of this Section VI.

d. Bulk plants which serve only storage tanks exempted from the provisions of subparagraph VI. B. 3. b. by reason of their small size or location in an attainment area shall load outbound transport trucks using equipment that provides for top loading of the petroleum distillate into the vehicle tank compartment through an extended fill tube which reaches within 15.24 cm (6 in.) of the bottom of the tank compartment; or shall use comparable equipment as approved by the Division.

4. Transport Vehicles

a. Rail cars shall be loaded only at facilities which allow for the following:

(i) A submerged fill pipe which reaches within 15.24 cm (6 in.) of the bottom of the tank.

(ii) Vapor collection and/or disposal equipment designed and operated to recover vapors displaced during the loading of the rail car.

(iii) A vapor-tight seal around the tank car hatch and the loading equipment.

b. Petroleum transport trucks which serve locations required to be equipped with vapor recovery equipment shall load only at facilities capable of disposing of collected vapors. Such vehicles must possess the proper equipment and follow work practices so that:

(i) Dry-break loading and unloading nozzles are used and are compatible with those required at loading facilities.

(ii) Vapor recovery hoses are connected at all times during unloading or loading of petroleum distillate.

(iii) Transport trailers and vehicle tanks are operated and maintained to prevent detectable hydrocarbon vapor loss during loading, transport, and delivery.

(iv) Compartment dome lids are closed and locked during transfers of petroleum distillate. Such lids may be opened for the purpose of certifying the accuracy of a delivery only prior to and after such delivery.

(v) Hoses, couplings, and valves are maintained to prevent dripping, leaking, or other liquid or vapor loss during loading or unloading.

Reproduced from
best available copy.

VII. CRUDE OIL

A. General Exemptions

1. Crude oil stored in tanks of 151,412 liters (40,000 gallons) or less is exempt from the storage provisions of this section.

2. Storage tanks with capacities of less than 1,590 cubic meters (10,000 barrels) used to store produced crude oil and condensate prior to lease custody transfer are exempt from the provisions of this Regulation No. 7.

B. Equipment

Pumps and compressors handling crude oil shall be subject to the provisions of subsection VI. A.

C. Storage

Except as provided in VII. A. 2. above, crude oil stored in tanks greater than 151,412 liters (40,000 gallons) shall be subject to the provisions of subparagraph B. 1. b. and paragraph B. 2. of Section VI.

• VIII. PETROLEUM PROCESSING AND REFINING

A. Separation of water from petroleum and petroleum products. (This subsection shall become effective January 31, 1982.)

Single or multiple compartment oil and effluent water separation equipment which can receive effluent water containing a volatile organic compound with a vapor pressure greater than 78 torr (1.5 psia) at 20°C shall be equipped with one or more of the following vapor loss control devices, properly installed, in good working order and properly maintained:

1. A solid cover with all openings sealed and the liquid contents totally enclosed. All gauging and sampling devices shall be vapor-tight except when gauging or sampling is taking place. Such access shall be minimized.

2. A pontoon-type or double-deck type floating roof, or internal floating cover resting on the surface of the contents and equipped with a closure seal or seals to close the space between the edge of the floating roof (or cover) and the wall(s) of the compartment. All gauging and sampling devices shall be vapor-tight except when gauging or sampling is taking place.

3. A vapor recovery system consisting of a vapor gathering device capable of collecting the volatile organic compound vapors discharged and a vapor disposal device capable of processing such volatile organic vapors so as to prevent their emission into the atmosphere. All container gauging and sampling devices shall be vapor-tight except when gauging or sampling is taking place.

4. Other equipment of equal or greater efficiency provided the design and effectiveness of such equipment as documented, is submitted to and approved by the Division.

B. Emissions from Petroleum Refineries

1. Process unit turnarounds and equipment blowdowns shall be vented through a flare or other combustion device which assures 90% combustion. All flares shall be of the smokeless type and shall conform to other applicable regulations pertaining to design and operation.

2. Process equipment vents and pressure relief valves shall be vented to a flare or combustion device.

3. Vacuum-Producing Condensers

   a. All emissions of non-condensable hydrocarbons from condensers used to produce vacuum in process equipment shall be vented to a flare or other combustion device. Such venting shall include, but not be limited to, the hot wells and accumulators.

   b. For barometric-type condensers in operation on (or during the 2-month period preceding) the effective date of this regulation, compliance with the above provisions (VIII. B. 3. a.) may be extended until December 31, 1982.

4. All sampling, testing, and measuring ports, hatches, and access openings shall be maintained and operated to prevent detectable organic vapor emissions, except during actual sampling or access.

IX. SURFACE COATING OPERATIONS

A. General Provisions

1. Definitions

a. "Coating Applicator" means an apparatus used to apply a surface coating.

b. "Coating Line" means an operation which includes both (1) a coating applicator and (2) device(s) and/or area(s) to accomplish one or more of the following processes: flash-off, drying, curing, heat-setting and/or polymerization.

c. "Coating - solids" means that portion of a surface coating which remains after volatile components have escaped.

d. "Final repair application" means that application of surface coating specifically intended to repair damage and imperfections in existing surface coats.

e. "Finished coating-solids" means those coating-solids that remain on a coated substance after completion of all production processes.

f. "Flashoff area" means the space between the application area and the oven.

g. "Prime coat" (also termed "primer") means the first film of coating applied in a multiple-coat operation.

h. "Surface coating" means a liquid, liquifiable, or mastic composition which is converted to a solid (or semi-solid) protective, decorative, or adherent film or deposit after application as a thin layer.

In a machine which has both coating and printing units, all units will be considered as performing a printing operation. Such a machine is subject to the standards governing graphic arts, and thus is not covered by coating standards.

Reproduced from best available copy.

i. "Surface-Coating Oven" means a chamber within which heat is used to bake, cure, polymerize, and/or dry a surface coating.

j. "Topcoat" means the final film of coating applied in a multiple-coat operation.

2. Abbreviations

a. Kg/lc shall be the abbreviation for: kilograms of solvent VOC per liter of coating (minus water).

b. Lb/gc shall be the abbreviation for: (avoirdupois) pounds of solvent VOC per gallon of coating (minus water).

3. Testing

a. The VOC content of all coatings is determined by removing all water from the coating and then by determining the weight of VOC in a liter of the resulting water-free coating.

b. The most recent revisions of the following standard methods are to be used to determine the relevent components of coatings.

(i) Method A - ASTM D 1644: Standard Methods of Test for Non-Volatile Content of Varnishes.

(ii) ASTM D 1475: Standard Method of Test for Density of Paint, Varnish, Lacquer, and Related Products.

(iii) ASTM D 2369: Standard Method of Test for Volatile Content of Paints.

(iv) ASTM D 3792: Standard Method of Testing for Water in Water Reducible Paint by Direct Injection into a Gas Chromatograph.

4. Sampling

To determine compliance with applicable surface coating standards, samples will be taken from the coating as freshly delivered to the reservoir of the coating applicator.

5. Compliance alternatives: see subsection II. B., (page 2).

B. Automobile and Light-Duty Truck Assembly Plants

1. Definitions

a. "Automobile" means a passenger motor-vehicle or a derivative of same, capable of seating twelve (12) or fewer passengers, and having at least two (2) driven wheels.

b. "Automobile Assembly Facility" means a facility where parts (including assembled or partially assembled components) of automobiles are received, and finished automobiles are produced, partially or wholly by an assembly line.

c. "Light-Duty Truck" means any motor vehicle rated at 8,500 pounds (3,855 kilograms) gross vehicle weight or less, and having at least two driven wheels, which is designed primarily for purposes of transportation of property or is a derivative of such vehicles. It includes, but is not limited to, pickup trucks, vans, and window vans rated at 8,500 pounds gross vehicular weight or less.

d. "Light-Duty Truck Assembly Facility" means a facility where parts (including assembled or partially assembled components) of light-duty trucks are received, and finished light-duty trucks are produced, partially or wholly by an assembly line.

2. Emission Limitations

	Maximum Proportions of Volatile Organic Compounds	
	Kilograms per liter of coating (minus water)	Pounds per gallon of coating (minus water)
Prime application, flashoff area, and oven	0.23	1.9
Topcoat application area and oven	0.34	2.8
Final repair application, flashoff area and oven	0.58	4.8

C. Can Coating Operations

This subsection shall become effective two (2) years after the effective date of this regulation.

1. Definitions

a. "Can Coatings" mean any coatings containing organic materials and applied -- or intended for application -- by spray, roller, or other means onto the inside and/or outside surfaces of formed cans and components of cans.

b. "End Sealing Compound" means a substance which is coated onto can ends and which functions as a seal when the end is assembled onto the can.

c. "Exterior Base Coat" means a coating applied to the exterior of a can to provide protection to the metal and/or to provide background for any lithographic or printing operation.

d. "Interior Base Coat" means the initial coating applied to the interior surface of a 3-piece can.

e. "Interior Body Spray" means a coating sprayed onto the interior surface of the can body to provide a protective film between the can and its contents.

f. "Overvarnish" means a coating applied directly over a design coating for one or more of the following purposes: reduce the coefficient of friction, provide gloss, protect against abrasion, protect against corrosion.

Reproduced from best available copy.

g. "Three-Piece Can Side Seam Spray" means a coating sprayed onto the interior and/or exterior of a can body seam on a 3-piece can to protect the exposed metal.

h. Two-Piece Can Exterior End Coat" means a coating applied to the exterior of the bottom end of a two-piece can.

2. Emission Limitations

	Kg/lc	lb/gc
Can Coating		
Sheet base coat (exterior and interior) and overvarnish; two-piece can exterior (base coat and overvarnish)	0.34	2.8
Two and three-piece can interior body spray, two-piece can exterior end (spray or roll coat)	0.51	4.2
Three-piece can side-seam spray	0.66	5.5
End sealing compound	0.44	3.7
Any additional coats	0.51	4.2

D. Coil Coating Operations

1. Definition

"Coil Coating" means any surface coating containing organic materials and applied or intended for application by spray, roller, or other means onto one or both surfaces of flat metal sheets or strips: these are subsequently wound or otherwise formed into rolls or coils intended for further processing or use.

2. Emission Limitations

	Kg/lc	lb/gc
Coil Coating		
Any coat (primer, intermediate coat, topcoat)	0.31	2.6

E. Fabric Coating Operations (This subsection shall become effective one year after the effective date of this regulation).

1. Definition

"Fabric Coating" means the process of coating the full, usable surface of a fabric web or sheet with a uniform layer of material, which when processed forms a flexible film or covering, adherent to the fabric substrate, and which is: (1) parallel to the plane of the fabric and/or (2) covers the fibers of the fabric. "Fabric Coating" excludes those processes normally included under fabric finishing (e.g. dyeing, treating for stain and wrinkle resistance, etc.) or under fabric impregnation.

2. Emission Limitations

	Kg/lc	lb/gc
Fabric Coating Line	0.35	2.9

F. Foil Coating Operations (This subsection shall become effective one year after the effective date of this regulation).

1. Definition

"Foil Coating" means applying a "surface coating" to the surface of a metal foil. It includes bare, coated, and backed foils.

2. Emission Limitations

	Kg/lc	lb/gc
Foil Coating Line	0.35	2.9

G. Large Appliance Coating Operations

1. Definition

"Large Appliances" includes doors, cases, lids, panels, interior support parts, and any other large (greater than one square decimeter [15.5 square inches]) coated surfaces of residential and commercial washers, dryers, ovens, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and all other products under SIC Code 363, designated by convention of the industry as large appliances.

2. Emission Limitations

	Kg/lc	lb/gc
Large Appliance Coating Line; prime, single or topcoat application area, flashoff area, and oven	0.34	2.8

H. Magnet Wire Coating Operations

1. Definition

"Magnet Wire Coating" means those operations which apply a coating of electrically insulating varnish or enamel (or similar substance) to wire which is known as "magnet wire." Magnet wire is usually copper or aluminum, and is used for electric motors, generators, transformers, magnets, and related products.

2. Emission Limitations

The total VOC emitted by the production process including (but not limited to) curing oven(s), coating die(s), equipment-cleaning and coating-reducing shall not exceed 0.26 kilograms of solvent per liter of coating-solids deposited on the finished wire (2.16 pounds of solvent per gallon of coating-solids deposited on the wire).

3. Control Conditions

a. Because of catalyst poisoning caused by certain coatings (e.g. polyester amide-imides), coating lines may not use catalytic oxidation as the primary control technique, unless it can be demonstrated that the catalyst can retain 85% efficiency for at least 3,000 hours.

b. If an owner can demonstrate that there is a measurable loss of volume (i.e. shrinkage) of the coating-solids in the curing process without significant loss of mass (weight) then he may at the discretion of the Division use the equivalent mass/mass ratio (i.e. Kg VOC per Kg of finished coating-solids) for that particular operation.

I. Metal Furniture Coating Operations

1. Definitions

a. "Metal Furniture" means furnishings commonly considered furniture, for domestic, business, and/or institutional use, which have one or more essential, major components made of metal. "Metal furniture" includes, but is not limited to, tables, chairs, wastebaskets, beds, desks, lockers, shelving, cabinets, room dividers, clothing racks, chests of drawers, and sofas.

b. "Metal Furniture Coating" means applying a "surface coating" to "metal furniture" as defined above. It excludes coating of non-metal components. Also excluded are small, strictly decorative, metal components if:

(i) same occupy in total no more than 5% of the normally visible metal (including coated metal) surface of the finished piece of furniture, and

(ii) no single piece of same has a coated surface greater than one (1) square decimeter (15.5 square inches).

2. Emission Limitations

	Kg/lc	lb/gc
Metal Furniture Coating Line - All coats (including prime, single, and topcoat)	0.36	3.0

J. Paper Coating Operations (This subsection shall become effective one year after the effective date of this regulation.)

1. Definition

"Paper Coating" means applying a "surface coating" to paper. It includes, but is not limited to, the production of: coated, glazed, and varnished paper; carbon and pressure-sensitive copy papers; paper adhesive-labels and tapes; blue-print, photographic and copier paper.

2. Emission Limitations

	Kg/lc	lb/gc
Paper Coating Line	0.35	2.9

K. Plastic-Film Coating Operations (This subsection shall become effective one year after the effective date of this regulation.

1. Definition

"Plastic-film Coating" means applying a "surface coating" to a flexible web or sheet of thin plastic substance, excluding all rubbers and vinyls*(polyvinyl chloride) except for the following two categories of vinyl products: (1) vinyl tapes and (2) vinyls coated with an adhesive or pressure- sensitive coating. It includes, but is not limited to: plastic typewriter ribbons, photographic film, adhesive tapes, and magnetic recording tapes. (*see subsection L)

2. Emission Limitations

	Kg/lc	lb/gc
Plastic-Film Coating Line	0.35	2.9

L. Vinyl Coating Operations

1. Definition

"Vinyl Coating" means applying a "surface coating" to a vinyl (polyvinyl chloride) web or sheet, including bare, coated, and backed vinyls. It includes printing of same using rotogravure techniques. Excluded are*: (1) the coating of same with adhesive or pressure-sensitive coatings and (2) vinyl tapes. (*see subsection K).

2. Emission Limitations

	Kg/lc	lb/gc
Vinyl Coating Line	0.45	3.8

X. USE OF SOLVENTS FOR DEGREASING AND CLEANING

(All signs and applicable operating procedures shall be in compliance by September 1, 1980. All equipment which must be newly acquired under the provisions of this section shall be in proper operation by June 1, 1981.)

A. General Provisions

1. Exemptions: Methylene Chloride (dichloromethane) and Methyl Chloroform (1,1,1 trichloroethane) and Freon 113 (1,1,2-trichloro-1,2,2'trifluoroethane) are exempt from the provisions of this section X.

2. Compliance alternatives: see subsection II.B., (page 2).

3. Definitions

   a. "Cold-cleaner" means a container of non-aqueous liquid solvent which is designed, used, or intended for cleaning solid objects. A "cold-cleaner" may have provisions for heating the solvent. It does not include vapor degreasers or continuously loaded conveyorized degreasers.

   b. "Non-conveyorized vapor degreaser" means an apparatus which uses non-aqueous solvent vapors within some type of container to degrease or otherwise clean solid objects. It excludes continuously loaded conveyorized degreasers.

   c. "Conveyorized degreaser" means an apparatus that performs degreasing or other cleaning functions through the use of non-aqueous liquid solvent and/or solvent vapors within a container, and which has a conveyor mechanism allowing continuous loading of items conveyed into and out of the solvent.

   d. "Freeboard" in a vapor degreaser means the vertical distance from the top of the vapor zone (as established by normal operations within the specifications of the degreaser manufacturer) to the top of the degreaser.

For cold-cleaners "freeboard" means the vertical distance from the surface of the solvent liquid to the top of the degreaser.

If all sides are not even, the vertical distance to the top of the lowest side shall be used to make the determination of freeboard.

e. "Freeboard ratio" means the ratio of the freeboard to the width of the solvent surface.

4. Transfer of waste solvent and used solvent

In any transfer of waste or used solvent, at least 80% by weight of the solvent/waste liquid must be retained (i.e. no more than 20% of the liquid solvent/solute mixture may evaporate or otherwise be lost during transfers.)

5. Storage of waste solvent and used solvent

Waste or used solvent shall be stored in closed containers unless otherwise required by law.

B. Control of Solvent Cold-Cleaners

1. Control Equipment for Solvent Cold-Cleaners

a. Covers

(i) All cold-cleaners must have a properly fitting cover.

(ii) Covers must be designed to be easily operable with one hand under any of the following conditions

(A) Solvent vapor pressure is greater than 15 torr 0.3 psia) at 38°C (100°F).

(B) The solvent is agitated by an agitating mechanism.

(C) The solvent is heated.

b. Drainage Facility

(i) All cold-cleaners must have a drainage facility that captures the drained liquid solvent.

Reproduced from best available copy.

(ii) For cold-cleaners using solvent which has a vapor pressure greater than 32 torr (0.62 psia) measured at 38°C (100°F) either:

(A) There must be an internal drainage facility within the confines of the cold-cleaner, so that parts are enclosed under the (closed) cover to drain after cleaning, or if such a facility will not fit within;

(B) An enclosed, external drainage facility that captures the drained solvent liquid.

c. A permanent, conspicuous sign shall be mounted on or next to the cold-cleaner. The sign shall list the summarized operating requirements.

d. Solvent spray apparatus must not have a splashing or atomizing action but rather should produce a solid, cohesive stream.

e. Major control device for solvents with significant vapor pressure.

For solvents with a vapor pressure above 32 torr (0.62 psia) at 38°C (100°F), or, if the solvent is heated above 50°C (120°F), then one of the following techniques must be used:

(i) A freeboard ratio greater than or equal to 0.7.

(ii) A water or a non-volatile liquid cover, on the conditions that the cover liquid is not soluble in the solvent and the depth of the cover liquid is sufficient to prevent the escape of solvent vapors.

(iii) Other systems of equivalent control, such as a refrigerated chiller or carbon adsorption system.

2. Operating requirements for solvent cold-cleaners

a. The cold-cleaner cover shall be closed whenever parts are not being handled within the cleaner confines.

b. Drain cleaned parts for at least 15 seconds and until dripping ceases. Tip out any pools of solvent on the clean part back into the tank.

C. Control of Non-Conveyorized Vapor Degreasers

1. Control Equipment

a. The cover shall be designed and operated so that it can be easily opened and closed through the use of mechanical assists such as spring loading, counterweights, etc.; opening and closing the cover will not disturb the vapor zone.

b. Safety Switches

The following two types of switches shall be installed on vapor degreasers:

(i) Condenser flow switch and thermostat - (shuts off sump heat if the condenser coolant is either not circulating or is too warm); and

(ii) Spray safety switch - (shuts off spray pump if the vapor level drops excessively).

c. Major control device

(i) For non-conveyorized vapor degreasers with an open area (with the cover open) of one square meter (10.8 ft^2) or less, either the freeboard ratio must be greater than or equal to 0.75, or else one of the major control devices in (ii) below must be used.

(ii) For non-conveyorized vapor degreasers with an open area (with the cover open) greater than one (1) square meter, (10.8 ft^2), at least one of the following control systems must be used:

(A) Both a powered cover and a freeboard ratio greater than or equal to 0.75.

(B) A refrigerated chiller with a cooling capacity equivalent to or greater than the applicable specifications in Appendix C.

(C) An enclosed design: A system where the cover(s) or door(s) opens only when a dry part is entering or exiting the degreaser.

(D) A carbon adsorption system with ventilation greater than or equal to 15 cubic meters each minute per square meter (50 cfm/ft^2) of air/vapor area (when the cover(s) is open), and exhausting less than 25 ppm of solvent averaged over one complete adsorption cycle.

(E) A control system demonstrated to have a control efficiency equivalent to or better than any of the above.

d. There shall be permanent, conspicuous labeling summarizing operating requirements 2.a. through 2.h. below.

2. Operating Requirements

a. Keep cover closed at all times except when processing work loads into or out of the degreaser.

b. The following operations will be performed to minimize solvent carry-out:

(i) Rack parts to allow full drainage.

(ii) Move parts as slowly as is practicable in and out of the degreaser,(by hand a maximum of one foot every five seconds); a maximum of 5.5 cm/sec (10.8 ft/min) for a mechanically operated system.

(iii) Allow the workload to clean in the vapor zone at least 30 seconds or until condensation ceases.

(iv) Tip out any pools of solvent that remain on the cleaned parts before removal.

(v) Allow parts to dry within the degreaser at least 15 seconds and until visually dry.

c. Do not attempt to clean porous or absorbent materials; for example, cloth, leather, wood, rope, etc.

d. Work loads shall not occupy more than half of the degreaser's open top area.

e. Spraying shall not be done above the vapor level.

f. Repair solvent leaks immediately, or shut down the degreaser.

g. Exhaust ventilation should not exceed twenty (20) cubic meters per minute per square meter (65.6 cfm per sq. ft.) of degreaser open area, unless greater exhaust rates are necessary to meet Occupational and Safety Health Act Requirements.

h. The water separator must function so that no visible water is present in the solvent exiting the separator.

D. Control of Conveyorized Degreasers

1. Control Equipment

a. Major control devices

For all conveyorized degreasers with a solvent surface area greater than two (2) square meters (21.5 square feet), the degreasing must be controlled by at least one of the following:

(i) Carbon adsorptionsystem, with ventilation greater or equal to 15 cubic meters per minute per square meter (49.2 cfm/ft^2) of air/vapor interface for vapor degreasers (of air/liquid interface for non-vapor types) when downtime covers are open, and exhausting less than 25 parts per million of solvent (by volume) averaged over a complete adsorption cycle.

(ii) For vapor degreasers only: a refrigerated chiller with a cooling capacity equivalent to or greater than the applicable specifications in Appendix C.

(iii) A system demonstrated to have a control efficiency equivalent to or surpassing one or both of the above methods.

b. Prevention of Carry-out

Means shall be employed to prevent cleaned parts from carrying out solvent liquid or vapor, by such devices as a drying tunnel, tumbling basket(s), or other demonstrably effective method(s).

c. Safety Switches

(i) The following two (2) switch-circuits (or equivalent) shall be employed by all conveyorized vapor degreasers.

(A) A spray safety switch all shut off the spray pump and/or the conveyor if the vapor level drops excessively.

(B) A vapor level control thermostat shall shut off sump heat when the vapor level rises too high.

(ii) All conveyorized degreasers shall have a condenser thermostat and flow-detector switch (or equivalent) which shuts off sump heat if coolant is too warm or is not circulating.

d. Minimized Openings: Degreaser entrance and exit openings should silhouette work loads so that the average clearance between parts (or parts-containers) is either:

(i) less than 10 centimeters (4 inches) or;

(ii) less than 10 percent of the width of the opening.

e. Covers shall be provided to close off all the entrance(s) and exit(s) when the conveyor is not in use.

2. Operating Requirements

a. Exhaust ventilation should not exceed 20 m^3/minute per square meter of degreaser opening (65.6 cfm per square foot), unless necessary to meet OSHA requirements. Work-place fans should not be located near, nor directed at degreaser openings.

b. Carry-out emissions shall be minimized by:

(i) Racking parts in such a manner that best drainage is achieved.

(ii) Maintaining the vertical component of conveyor speed at less than 3.3 meters per minute (10.8 feet per minute).

c. Repair solvent leaks immediately, or shut down the degreaser.

d. The water separator shall function with an efficiency sufficient to prevent water from being visible in the solvent exiting the separator.

e. Down-time cover(s) must be placed over entrances and exits of conveyorized degreasers immediately after the conveyor and exhaust are shut down. Covers shall be retained in position until immediately before start-up.

Reproduced from best available copy.

XI. USE OF CUTBACK ASPHALT

A. Definitions

1. Asphalt: The dark-brown to black cementatious material (solid, semi-solid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.

2. Emulsified Asphalt: Asphalt emulsions produced by combining asphalt and water with emulsifying agent.

3. Cutback Asphalt: Any asphalt which has been liquified or made more plastic by blending with a VOC as a solvent or, in the case of some slow cure asphalts, which has been produced directly from the distillation of petroleum and contains condensate therefrom.

   Emulsified asphalt which contains less than five (5) percent of VOC by weight of residual asphalt is not included in this definition. (Residual oils are not included in the meaning of the term "VOC.").

4. Penetrating Prime Coat: An application of low-viscosity liquid asphalt to an absorbent surface in order to prepare it for paving with an asphalt concrete.

B. Limitations

1. Applicability

   The provisions of this Section XI. apply to the use and storage of cutback asphalt for the paving and maintenance of all public roadways (including alleys) only within ozone non-attainment areas.

2. Storage

   Stockpiles of aggregate mixed with cutback asphalt are permitted during the contiguous months of October through April. After December 31, 1981, such storage is not permitted during May through September except where it can be demonstrated to the Division that such storage is necessary.

3. Use

Cutback asphalt may be used for any paving purpose during the contiguous months of October through April. After December 31, 1981, no person shall use cutback asphalt for any purpose during the contiguous months of May through September except as provided below:

a. If used solely as a penetrating prime coat.

b. If the user can demonstrate to the Division that under the conditions of its intended use, there will be no emissions of organic compounds to the ambient air.

4. Phase-out Option

a. The prohibition against the use of cutback asphalt designated in paragraph 3 above may be postponed until December 31, 1982, if the applicant for such postponement submits to the Division no later than December 1, 1980, a written schedule which:

(i) Shows how the use of emulsified asphalt by the applicant will be phased in between the effective date of this regulation and October 1, 1982 to replace cutback asphalt for all paving purposes except penetrating prime coat; and

(ii) Demonstrates that not less than thirty (30) percent of the total liquid asphalt gallonage used for seal coating (e.g. chip sealing) during the phase-in period will be emulsified; and

(iii) Employs emulsified asphalt for seal coating in at least two of the following three years: 1980, 1981, 1982, and

b. Said schedule must receive written approval from the Division. Such approval shall be granted if the requirements of subparagraph 4.a. above are met.

c. The applicant must complete the projects designated in said schedule except that a project not listed on an approved schedule may qualify in lieu of an approved project if the substitution is approved by the Division in writing.

C. Record Keeping

During the months of May through September, the person responsible for the use or storage of any cutback asphalt, as permitted in subparagraph 3. a. and b. and paragraph 2. shall keep records of same, including type and amount of solvent(s) used.

APPENDIX A

CRITERIA FOR CONTROL OF VAPORS FROM GASOLINE TRANSFER TO STORAGE TANKS

I. Drop Tube Specifications. Submerged fill is specifically required. The drop tube must extend to within 15.24 cm (6 in.) of the tank bottom.

II. Vapor Hose Return. Vapor return line and any manifold must be minimum 7.6 cm (3 in.) ID. All tanks must be provided with individual overfill protection. (Liquid must not be allowed in the vent line or vapor recovery line.) Disconnect on liquid line should assure that all liquid in the hose is drained into the storage tank. The requirements for overfill protection as specified may be waived for existing storage tanks when it is demonstrated to the satisfaction of the appropriate local Fire Marshal, and where applicable, the State Oil Inspection Office that the installation of overfill protection devices on existing tanks is physically not possible.

III. Size of Vapor Line Connections. For separate vapor lines, nominal three inch (7.6 cm) or larger connections must be utilized at the storage tank and truck. However, short lengths of 2-inch (5.1 cm) vertical pipe no greater than 91.4 cm (3 ft.) long are permissible.

Where concentric (coaxial) connections are utilized, a 45 cm^2 (7 sq. in.) area for vapor return shall be provided. Four-inch concentric designs are acceptable only when using a venturi-shaped outer tube or where normal drop rate of 1,700 liters per minute (450 gpm) is reduced by at least 25%. Six-inch (15.24 cm) risers should be installed in new stations with concentric connections.

IV. Type of Liquid Fill Connection. Vapor tight caps are required for the liquid fill connection for all systems. A positive closure utilizing a gasket is necessary to prevent vapors from being emitted at ground level. Cam-lock closures meet this requirement. Dry break closures are preferred.

V. Tank Truck Inspection. Tank trucks are specifically required to be vapor-tight. An inspection procedure must be conducted at least once every six months to ensure properly operating manifolding and relief valves.

VI. Dry Break on Underground Tank Vapor Riser. Dry-break closures are required to assure transfer of displaced vapors to the truck and to prevent ground-level, gasoline-vapor emissions caused by failure to connect the vapor return line to the underground tanks (closure on riser to mate with opening on hose). These devices keep the tank sealed until the hose is connected to the underground tank. Concentric coupler without dry-breaks are required to have a dry-break on the vapor line connection to the coupler itself, rather than on the rise pipe from the storage tank. The liquid fill riser should be provided with a gap having a positive closure (threaded or latched).

VII. Equipment Ensuring Vapor-Hose Connection During Gasoline Deliveries.
An equipment system aboard the tank truck shall insure (barring deliberate tampering) that a vapor return hose is connected from the truck's vapor return line to the tank receiving gasoline. Such equipment must be in operation by October 1, 1981.

VIII. Vent Line Restriction Devices.
Vent line restriction devices are required. They both improve recovery efficiency and, as an integral part of any system, assure that the vapor return line is connected during transfer. If the liquid fill line were attached to the underground tank and the vapor return line were disconnected, then dry break closures would seal the vapor return path to the truck, forcing all vapors out the vent line. In such instances, a restriction device on this vent line greatly reduces fill rate, warning the operator that the vapor line is not connected. Both of the following devices must be used:

(a) An orifice of one-half to three-fourth inch (1.25 - 1.9 cm) ID.

(b) A pressure/vacuum relief valve set to open at (1) a positive gauge-pressure greater or equal to five inches of water (9 torr) and at (2) a negative gauge-pressure greater or equal to five inches of water (9 torr).

IX. Fire and Safety Regulations.
All new or modified installations must comply in their entirety with all code requirements, inclduing NFPA Pamphlet 30 (fiberglass is preferred for new manifold lines). For any questions concerning compliance, please contact State Oil Inspection or your local Fire Marshal.

X. State Oil Inspection.
Requirements of the State Oil Inspection office make accurate measurements of the liquid in the underground tank necessary. Vapor-tight gauging devices will be required in all systems designed such that a pressure other than atmospheric will be held or maintained in the storage tank. The volume of liquid in tanks maintained at atmospheric pressure may be determined with a stick through the submerged drop tube or through a separate submerged gauging tube extending to within 15.24 cm (6 in.) of the tank bottom.

APPENDIX B

CRITERIA FOR CONTROL OF VAPORS FROM GASOLINE TRANSFER AT BULK PLANTS (VAPOR BALANCE SYSTEM)

I. Storage Tank Requirements:

A. Drop Tube Specification: Underground tanks must contain a drop tube that extends to within six inches (15.24 cm) of the tank bottom. All top loaded above-ground tanks must contain a similar drop tube. Above-ground tanks using bottom loading meet the submerged fill requirement.

B. Size of Vapor Lines from Storage Tanks to Loading Rack: See nomograph (Attachment 1). NOTE: Affected sources are free to choose a pipe diameter different from the one suggested by the nomograph if sufficient justification and documentation is presented.

C. Pressure Relief Valves: All pressure relief valves and valve connections must be checked periodically for leaks, and be repaired as required. The relief valve pressures should be set in accordance with Sections 2-2.5.1 and 2-2.7.1 inclusive of the current NFPA Pamphlet No. 30.

D. Liquid Level Check Port: Access for checking liquid level by other than a vapor-tight gauging system shall be vapor-tight when not being used. Tank level shall be checked prior to filling to avoid overfills.

E. Miscellaneous Tank Openings: All other tank openings, e.g. tank inspection hatches, must be vapor tight when not being used.

F. Storage Tank Overfill Protection: Except for concentric (co-axial) delivery systems, underground tanks must have ball check valves (stainless steel ball). Tanks with concentric delivery systems must have Division-approved overfill protection, (e.g. cutoff pressure-switch in vent line).

II. Loading Rack Requirements:

A. Loading Specification: A vapor-tight bottom-loading or top-loading system using submerged fill with a positive seal, e.g., the Wiggins (tm) system, is required. NOTE: Bulk plants delivering solely to exempt accounts are required to have submerged fill but loading need not be vapor-tight.

B. Dry-Break on Storage Tank Vapor Return Line: A dry-break is required to prevent ground-level gasoline vapor emissions during periods when gasoline transfer is not being made. This device keeps the tank sealed until the vapor return hose is connected.

III. Tank Truck* Requirements:

A. Vapor Return Modification: Tank trucks must be modified to recover vapors during loading and unloading operations. NOTE: Tank trucks making deliveries solely to exempt accounts do not require this modification. However, 97% submerged fill is required when top loading.

B. Loading Specification: Bottom loading or top loading using submerged fill with a positive seal is required for tank trucks modified for vapor recovery. NOTE: When loading a tank truck with this modification without the vapor return hose connected (this is allowed at bulk plants servicing exempt accounts returning without collected vapors in the tank), the requirements of NFPA Pamphlet No. 385, "Loading and Unloading Venting Protection in Tank Vehicles, Section 2219 Paragraph c", must be met.

C. Vapor Return Hose Size: A minimum three-inch (7.6 cm) ID vapor return hose is required.

D. Tank Truck Inspection: Tank trucks are required to be vapor-tight. Periodic visual inspection is necessary to insure properly operating manifolding and relief valves.

*The term "tank truck" is meant to include all trucks with tanks used for the transport of gasoline, such as tank wagons, account trucks and transport trucks.

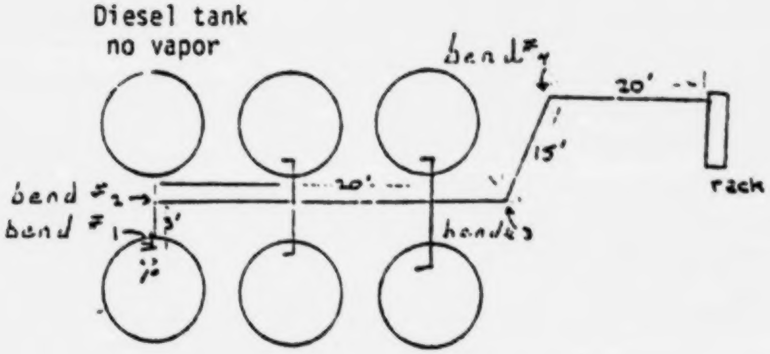
Attachment 1

To find minimum size of vapor lines for your bulk plant:

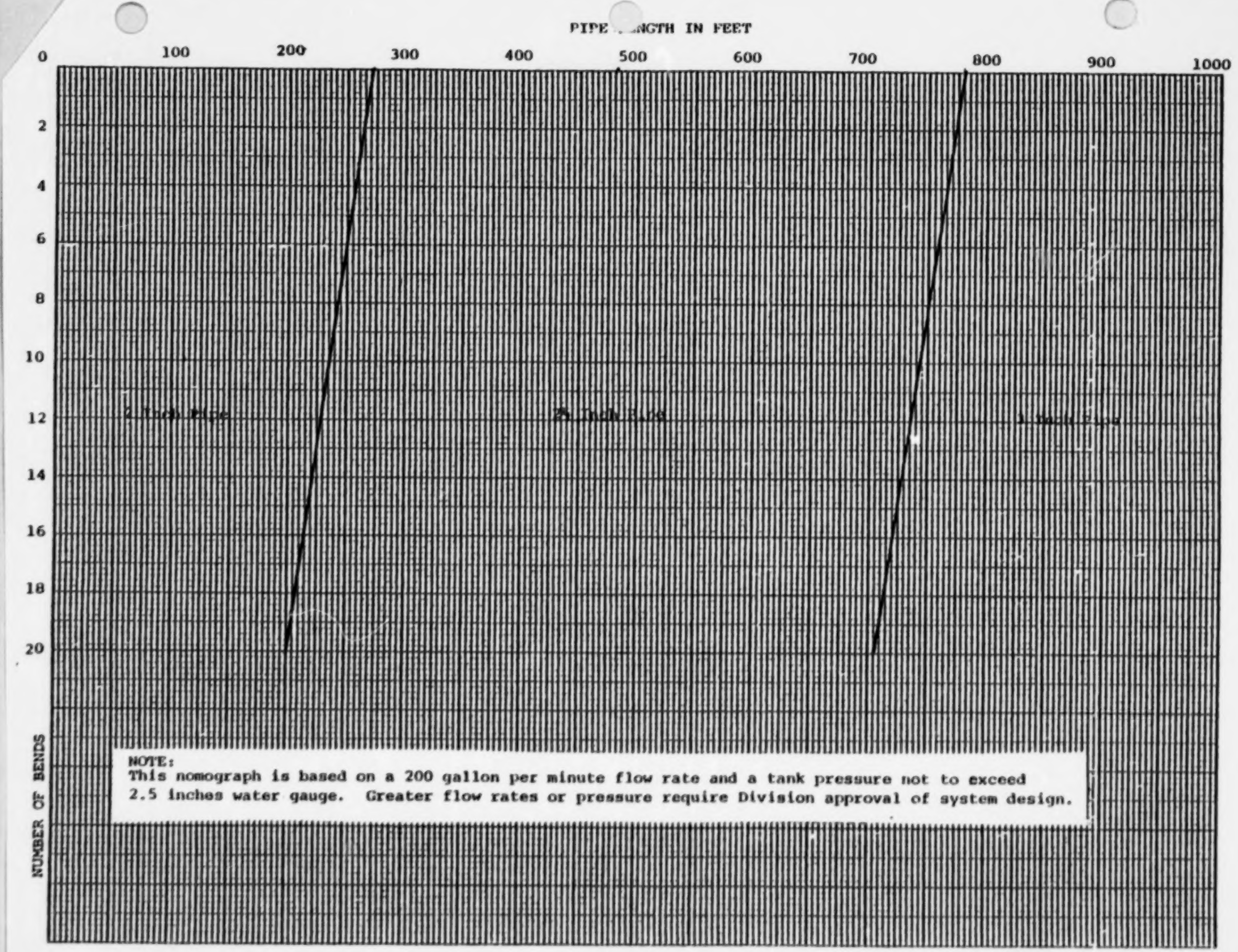
1. Draw your bulk plant.
2. Draw in vapor lines.
3. Measure length of vapor lines from rack to most distant tank - longest distance possible.
4. Count number of elbows, 45° bends count same as 90°.
5. Find length on top of chart.
6. Find number of bends on side of chart.
7. Find point where both length and number meet.

This is the minimum ID diameter of all vapor lines.

Example:



1. 4 bends
2. Length of pipe is distance from rack to farthest tank - here it's 59'
3. Find 4 bends on side of chart and 59' on top of chart. These meet at a point inside 2" area. Therefore 2" vapor lines are minimum size to be installed.



NOTE:
This nomograph is based on a 200 gallon per minute flow rate and a tank pressure not to exceed 2.5 inches water gauge. Greater flow rates or pressure require Division approval of system design.

APPENDIX C

MINIMUM COOLING CAPACITIES FOR REFRIGERATED FREEBOARD CHILLERS ON VAPOR DEGREASERS

The specifications in this Appendix apply only to vapor degreasers that have both condenser coils and refrigerated freeboard chillers. (The coolant in the condenser coils is normally water). The amount of refrigeration capacity is expressed in Calories/Hour per meter of perimeter. This perimeter is measured at the air/vapor interface.

For refrigerated chillers operating below 0°C, the following requirements apply:

DEGREASER WIDTH	*CALORIES/HR METER OF PERIMETER	BTU/HR FOOT OF PERIMETER
Less than 1.1 meters (3.5 ft.)	165	200
1.1 - 1.8 meters (3.5 - 6.0 ft.)	250	300
1.8 - 2.4 meters (6.0 - 8.0 ft.)	335	400
2.4 - 3.0 meters (8.0 - 10.0 ft.)	415	500
Greater than 3.0 meters (10 ft.)	500	600

---

*Kilocalories (1 Kilocalorie = 4184.0 joules)

For refrigerated chillers operating above 0°C, there shall be at least 415 Calories/Hr - meter of perimeter (500 BTU/Hr-ft.), regardless of size.

Definition:

"Air/Vapor Interface" - means the surface defined by the top of the solvent vapor layer within the confines of a vapor degreaser.

REGULATION NO. 9

"The Reduction of Automotive Air Pollution in the Denver Region Through the Encouragement of Travel To and From Work by Public Transit, Ridesharing, and other Emissions-Reducing Travel Modes"

I. STATEMENT OF INTENT, DEFINITIONS, AND AREA OF APPLICATION

A. Statement of Purpose

The purpose of this regulation is to reduce air pollution resulting from emissions from single-occupancy automobile travel in the Denver region, primarily through the encouragement of travel by public transit, ride sharing, and other emission reducing modes of travel.

B. Area of Application

This regulation shall apply to the Denver Region Air Quality Non-Attainment Area which includes all or portions of the counties of Adams, Arapahoe, Boulder, Denver, Douglas and Jefferson.

C. Definitions

The following terms shall have the following meanings when used in this regulation:

1. Bicycle Routes - Those routes designated for bicycle use by the appropriate governmental authority within the Area of Application.

2. Business Location - A facility owned, operated, or controlled by an Employer or Business Landlord at which Employees or Tenants work, including, but not limited to, a combination of facilities considered to be a common site, single building, office parks, etc.

3. Carpool - Use of a motor vehicle by two or more persons who commute between places of residence and a business location at least three (3) days per week, where one of the persons commuting owns, leases, or operates the motor vehicle.

4. Carpool Matching Service - A system designed to match two or more employees or tenants to facilitate their use of a carpool; including, but not limited to, such techniques as pin-and-map matching, zip-code matching, and computer geo-code matching.

5. Commission - The Colorado Air Pollution Control Commission.

6. Compliance Plans - A written plan of action prepared by Employers and Landowners conforming with the requirements of this regulation.

7. Division - The Air Pollution Control Division of the Colorado Department of Health.

8. DRCOG - The Denver Regional Council of Governments.

9. Employee - Any person performing services for an Employer for which he is paid wages, salary, or other compensation, including commissions or fees, but excluding personal service contracts for single projects of less than six (6) months duration.

10. Employee or Tenant Census - A written statement by any public or private entity or person certifying and providing evidence as to whether or not he is a Major Employer, or by any owner or long-term lessee of improved real property certifying whether or not he is a Major Business, Landlord, pursuant to the definitions of these terms in this regulation.

11. Major Business Landlord - The owner(s) or long term lessee(s) (20 years or more from the beginning of the term of the lease) of the improvements on improved real property which constitute a Business Location, including, but not limited to shopping centers, office buildings, office condominiums and properties operated by office co-ops, used as a work place by two-hundred fifty (250) or more persons excluding Employees who work for Major Employers, as herein defined.

12. Major Employer - A public or private entity or person who, for a continuous period of six (6) months or more per calendar year, has under its control and direction one-hundred (100) or more persons who work at or report to a single Business Location, as hereinafter defined during regular daily work periods, and who are paid wages, salaries, commissions, or other compensation for such work. A major employer may have more than one Business Location at which one-hundred (100) or more employees work.

13. RTD - Regional Transportation District.

14. Tenants - Those persons who work at a business location owned by a Business Landlord at least four (4) days of each week for not less than twenty-six (26) weeks in a calendar year.

15. Vanpool - A service provided by one or more Employers and/or Business Landowners or by a third party, by which Employees and/or Tenants are transported to and/or from a common or closely located Business Location(s), whether or not a fare is charged.

II. REQUIREMENTS TO DETERMINE APPLICABILITY - EMPLOYEE OR TENANT CENSUS

Any Employer or Business Landlord shall, upon the request of the Division, provide the Division with an Employee or Tenant Census in the manner and form prescribed by the Division. Such an Employee or Tenant Census shall be submitted within thirty (30) days of the Division's request. Such a Census shall not be required of any entity more than once every six (6) months.

III. REQUIREMENTS TO FILE COMPLIANCE PLANS

A. Compliance Plan Requirements and Contents.

1. Every Major Employer and Major Business Landlord in the Area of Application shall prepare, adopt, and submit to the Division within the time period hereinafter provided a written Compliance Plan for each Business Location with one-hundred (100) or more Employees or two-hundred and fifty (250) or more Tenants, signed by an authorized agent and containing a commitment to implement and maintain a program which meets the requirements of this regulation.

2. Each Compliance Plan shall set forth with reasonable detail the Employer's or Business Landlord's plan which shall include provisions for at least the following:

    a. Dissemination of written information to all Employees and Tenants regarding the DRCOG Carpool Matching Service; or establishment of and dissemination of written information to all Employees and Tenants regarding a Carpool Matching Service provided by the Employer or Landlord which provides coverage for the entire Area of Application; and

b. Dissemination of written information to all Employees and tenants concerning the RTD routes operated throughout the Area of Application, including schedules for all RTD routes with a bus stop within at least a one-mile radius of the Business Location, and upon request, all other RTD routes; and

c. Dissemination of written information to all Employees and Tenants regarding all bicycle routes located within at least a five-mile radius of the Business Location and dissemination of available information regarding bicycle safety rules; and

d. Dissemination of written information to all Employees and Tenants regarding available Vanpooling, if any; and

e. Establishment of Parking Facilities for Carpools and Vanpools, as hereinafter required, and dissemination of written information to all Employees and Tenants regarding same.

f. Establishment of bicycle parking facilities, as hereinafter required, and dissemination of written information to all Employees and Tenants regarding same.

B. Additional Requirements

Each Major Employer and Major Business Landlord shall encourage Employees and Tenants to avail themselves of the Carpool Matching Service Described in its Compliance Plan. No Employer or Business Landlord shall hinder or obstruct an Employee's or Tenant's access to any Carpool Matching Service or the use thereof by any direct or indirect means. Each Major Employer and Business Landlord shall provide updated information regarding the Carpool Matching Service contained in its Compliance Plan to all Employees and Tenants at least semi-annually. Each Major Employer and Major Business Landlord shall provide to all new Employees and Tenants the most current information regarding Carpool Matching Service within thirty (30) days of the Employee's or Tenant's commencing work at an Employer's or Landlord's Business location.

C. Parking Facilities for Carpools and Vanpools.

If a Major Employer or Major Business Landlord provides or Subsidizes parking facilities or spaces to any Employee or Tenant for parking of motor vehicles used primarily for commuting between place of residence and the Business Location, whether such parking spaces are provided for a fee or free of charge and whether on property owned, leased, or otherwise operated or controlled by the Employer or Tenant, such Employer or Landlord shall promptly provide guaranteed parking spaces under the same or more favorable terms and conditions for each Carpool and/or Vanpool in which its Employees or Tenants participate, when the majority of such Carpool or Vanpool participants are Employees or Tenants of the Employer or Landlord providing the parking Facilities. In no event shall a major employer or major business Landlord be required to purchase or subsidize additional parking spaces.

D. Bicycle Parking Facilities

If a Major Employer or Major Business Landlord provides or subsidizes parking facilities for motor vehicles used primarily for other than the Employer's or Landlord's business purposes, such Employer or Landlord shall provide an adequate number of bicycle parking facilities which will accommodate the parking and securing of bicycles for Employees, Tenants, customers and visitors.

IV. COMPLIANCE PLAN FILINGS - TIME, APPROVAL, EXEMPTIONS, WAIVERS, AND MODIFICATIONS

A. Filing of Plans

The Division shall notify each Major Employer and Major Business Landlord in writing of the requirements of this regulation. Receipt of such notice is a condition precedent to the applicability of this regulation. Within ninety (90) days after receipt of such notification, the Employer or Landlord shall file with the Division its Compliance Plan, or its request for exemption or waiver.

B. Approval and Disapproval

The Division shall review and evaluate each Compliance Plan filed with it within sixty (60) days of its receipt by the Division. If the Division does not notify a Major Employer or Major Business Landlord of its approval or disapproval within sixty (60) days, such plan shall be deemed approved. Upon approval of a Compliance Plan, the Division shall issue a certificate of approval to the Employer or Landlord who shall post said certificate in a conspicuous place in the Business Location. If a Compliance Plan as filed is disapproved by the Division, the Division shall issue a letter of disapproval, setting forth in detail reasons for disapproval, and the Employer or Landowner shall have thirty (30) days within which to revise the plan and re-submit it to the Division. The Division shall have thirty (30) days to approve or disapprove the re-submitted plan and the provisions of this paragraph shall apply to the re-submittal.

C. Exemptions

After receipt of the Division's notification pursuant to Section IV. A. of this regulation, an Employer or Business Landlord may submit information detailing the reasons why it is not required to file a Compliance Plan with the Division or is exempt from the provisions of this regulation. (e.g., the Business Location is not within the Area of Applicability, Employer has fewer than one-hundred (100) employees, etc.). The Division shall make a determination whether the claimed exemption exists on the basis of the information contained in the request for exemption and shall notify the Employer or Landlord of its decisions within sixty (60) days of the receipt of the exemption request. The burden of establishing facts which support an exemption shall be on the employer or Landlord, and the Division shall have the authority to hold such conferences and obtain such information as is reasonably pertinent to the determination. Failure by the Division to approve or disapprove a request for exemption within sixty (60) days of its receipt by the Division shall be deemed an approval thereof.

D. Waivers

A Major Employer or Major Business Landlord may request a waiver from all or part of the requirements of this regulation on the basis of inability or impracticability in complying with the requirements of this regulation. The burden of establishing facts which support a waiver shall be on the Employer or Landlord and the Division shall have the authority to hold such conferences and obtain such information as is pertinent to the determination. A waiver can be granted by the Division only with the concurrence of the Commission. The Division may condition any such waiver upon the Employer's or Landlord's submittal of an alternative plan designed to contribute to achieving the purposes of this regulation. Failure by the Division to notify an employer or business landlord of approval or disapproval of a request for waiver within sixty (60) days of its receipt by the Division shall be deemed an approval thereof.

E. Modifications

If circumstances at a Major Employer's or Major Business Landlords Business Location Change such that an Employer or Business Landlord's Compliance Plan no longer meets the requirements of this regulation, the Employer or Business Landlord shall file a new or modified Compliance Plan meeting the requirements of this regulation within ninety (90) days of such change in circumstances. If the Division does not notify the Employer or Business Landlord of its decision to approve or disapprove such modification within sixty (60) days of its receipt by the Division, such modification shall be deemed approved.

Requests for modification of a Compliance Plan may also be initiated at an Employer's or Business Landlord's option, and may be filed with the Division at any time, but such modifications shall be implemented only after written approval by the Division. If the Division does not notify a Major Employer or Major Business Landlord of its decision to approve or disapprove such optional modification within sixty (60) days of its receipt by the Division, the modification shall be deemed approved.

V. DETERMINATION OF COMPLIANCE - INSPECTIONS

The Division shall have the authority to determine a Major Employer's or Major Business Landlord's compliance with this regulation or the Employer's or Landlord's compliance plan by personal inspection of a Major Employer's or Major Business Landlord's Business Location, provided Each Employer or Landlord who is to be so inspected shall be notified of each intended inspection and its purpose at least twenty-four hours prior to the time of inspection. The Division shall notify each Employer and Landlord who is inspected of any violations of this regulation or the Employer's or Business Landlord's compliance plan immediately upon completion of the inspections and shall be supplied with a written report of the results of the inspection within thirty (30) days of the inspection date. Such inspections by the Division may not be made more frequently than twice in any twelve (12) month period unless complaints of violation of this regulation have been received by the Division or the Division otherwise has cause to believe that the Employer, or Landlord is not in compliance with the requirements of this regulation or of the Employer's or Business Landlord's compliance plan. Such inspections may be made by the Division only during the normal working hours of a Major Employer or Major Business Landlord. The time of inspection will be determined by the Division, but must be at times reasonably convenient to the Employer or Landlord.

VI. REQUIREMENTS FOR THE REGIONAL TRANSPORTATION DISTRICT TO REPORT ON TRANSIT RIDERSHIP AND TRANSIT DEVELOPMENT PROGRAMS.

Commencing August 1, 1979, The Regional Transportation District (RTD), which provides public transit services in the Area of Application, shall submit to the Commission:

A. Copies of its current transit development program, by implementation of which it will at least double average weekday bus ridership between August 1977 to December 1982; copies of all subsequent transit development program; and summary statements of same; and

B. A report, to be submitted quarterly, of average total daily ridership, average daily peak period ridership, and average daily express ridership, to be reported on a monthly basis for each of the preceeding three (3) months; and a summary explanation of how such figures were derived; and

C. A report, to be submitted annually, of average total daily ridership and average daily express ridership, to be reported on a monthly basis for the preceding year; and

D. A concise statement to be submitted annually, assessing the degree of progress which has been made during the preceding twelve (12) months toward increasing ridership, and the anticipated trend in ridership for the upcoming twelve (12) months.

REGULATION NO. 11

Governing the Motor Vehicle Emissions Inspection Program for the Control of Air Contaminant Emissions from Motor Vehicles

A. Motor Vehicle Exhaust Gas Analyzers

1. Approval of Exhaust Analyzers

a. No emissions inspection required under this regulation shall be performed unless the type of instrument used for measuring exhaust gases from motor vehicles has been first approved by the Colorado Department of Health, Air Pollution Control Division (Division) as meeting the following requirements.

b. As an interim accommodation, a motor vehicle exhaust gas analyzer in use at the time of adoption of these regulations which does not meet all of the requirements of this Section A. may be temporarily approved by the Division for use for a period not to exceed twelve (12) months if, as determined by the Division, it substantially meets the certification requirements.

2. Exhaust Analyzer Design

For the purposes of this regulation, the exhaust analyzer shall be designed to measure hydrocarbons (HC) and carbon monoxide (CO) and shall incorporate both instruments into a single unit.

3. Applications for Approval of Exhaust Analyzer Equipment Manufacturers

Approval as required by Section A. 1. shall be secured by the manufacturer. A manufacturer requesting the approval of an instrument for the measurement of exhaust gases for use in the licensed emission inspection station shall make application therefor with the Air Pollution Control Division, 4210 East 11th Avenue Denver, Colorado 80220, on forms provided thereby.

4. Qualifications for Manufacturers of Exhaust Gas Analyzers

All manufacturers making application as required in subsection 3. above, shall meet the following qualifications:

a. Provide service and repair facilities, and personnel available in the State for warranty services, repair, maintenance and supplying parts for their exhaust analyzers for a period of at least five (5) years from the time of sale.

b. Supply instruction manuals which shall describe the operation and procedures for use, maintenance and calibration of exhaust analyzers and provide for instruction concerning the same, together with equipment to test the accuracy of the exhaust analyzers and to insure maintenance of quality control standards.

c. Provide technical specifications and design characteristics for the exhaust analyzers, including schematics and photographs.

d. Warrant that such exhaust analyzers will meet the minimum criteria to be approved for use in the licensed emissions inspection station.

5. Performance Standards

The following shall establish the minimum criteria for approval of exhaust analyzers:

a. Accuracy - The hydrocarbon and carbon monoxide sections of the exhaust analyzer shall each have an accuracy of ± 3% of full scale.

b. Warm-up Time - The exhaust analyzer shall reach stabilized operation within 30 minutes from power-on at ambient temperatures of 70°F (21°C) and 110°F (43°C) and within 60 minutes from power-on at an ambient temperature of 35°F (2°C). An instrument shall be considered stabilized as soon as the zero and span readings remain within ± 3% of full scale for five consecutive minutes.

c. Humidity Operating Range - The exhaust analyzer must properly operate in licensed emission inspection station environments up to at least 85% relative humidity (non-condensing).

d. Interference Effects - The interference effects of non-interest gases, particulates, and water vapor shall not be greater than ± 1% of full scale during normal operation.

e. Power Requirements - The exhaust analyzer shall operate on 115 volt alternating current (AC), 60 Hertz. The exhaust analyzer shall perform to the stated standards with power fluctuations of ± 10% of the specified input voltage.

f. Repeatability - The exhaust analyzer repeatability shall be within ± 2% of full scale during five (5) successive samples of the same gas source.

g. Safety Requirements - The instrument shall meet the safety requirements referenced in 36 Federal Register 105 dated May 29, 1971.

h. Sample Handling System - All materials of the sample handling system that come into contact with the gas sample shall not contaminate nor change the character of the gases to be analyzed. All internal surfaces shall be corrosion resistand to vehicle exhaust gases and constructed of such materials as to minimize molecular hydrocarbon hang-up.

The system shall contain a visual or audible indicator of degradation of sample flow sufficient to cause an error in excess of the accuracy specification.

i. System Response Time- The exhaust analyzer concentration shall read 90% of the final stabilized reading within ten (10) seconds after a step change in concentration level is initiated at the tailpipe sample probe inlet.

j. Temperature Operating Range - The exhaust analyzer shall operate within the specified performance limits in ambient air temperatures from 35°F (2°C) to 110°F (43°C) while exposed to wind from zero to 10 mph (16 kph). The exhaust analyzer shall be unaffected by ambient air temperatures from 0°F (-18°C) to 130°F (54°C) when in storage.

k. Drift - Zero and span drift of a warmed up exhaust analyzer shall not be greater than ± 3% of full scale during one hour of operation.

6. Calibration Using Span Gases

The Division shall use and require for use in the calibration of exhaust analyzers span gases and containers meeting the following parameters, blends, and specifications:

a. Standardizing Instruments - The calibration gases for standardizing instruments shall conform to the provisions outlined in 33 Federal Register 108, Part II, dated July 4, 1968, for automotive exhaust emission testing. Those gases shall be of precision quality and certified to be within ± 1% of the true concentration.

b. Colorado Motor Vehicle Emission Inspection Program - The span gas concentrations used for calibration of exhaust analyzers supplied to emission inspection stations shall be:

HC: 80% ± 5% of full scale.
CO: 80% ± 5% of full scale.

The carrier gas shall be nitrogen; the hydrocarbon gas shall be propane. Two component (HC, CO, and carrier) gases may be provided.

The accuracy of the emission inspection station span gas blend shall be certified by the blender to be ± 2% of labeled concentration.

c. Accuracy - Gas suppliers shall initially demonstrate their qualifications as a vendor of span gases. The Division may require additional evidence of qualifications at periodic intervals.

d. Containers - All gases shall be supplied in containers which meet the requirements of the Occupational Safety and Health Administration (PSHA), as specified in 36 Federal Register 105 dated May 29, 1971.

B. Testing and Licensing of Applicants for Emissions Inspectors

1. Certificates of Qualifications for Emissions Inspectors

a. Applications for certificates of qualification for emissions inspectors shall be filed with the Air Pollution Control Division, 4210 East 11th Avenue, Denver, Colorado 80220, and the issuance of certificates of qualification shall be administered by the Division. Applications for such certificates or qualification shall be completed on forms provided by the Division. Before an applicant may be given certificate of qualification, he must comply with the requirements of this Section B. 1.

b. An applicant must demonstrate knowledge and skill concerning the conduct of emissions inspection. Such knowledge and skill may be shown by:

(i) Successful completion of such training courses as are approved by the Colorado Air Pollution Control Commission (Commission). An applicant may be required to submit curriculum and transcripts from the training institution administering the courses for purposes of accreditation review and evidence of completion. The Commission shall accept as proof of training qualifications for the issuance of certificates of qualification, evidence that the applicant has attended and satisfactorily completed a course or courses of instruction in motor vehicle emissions control systems and inspection procedures conducted or supervised by any one of the following training sources accredited or approved for curriculum by the Commission:

(A) Public or private high schools;

(B) Adult educational institutions or training programs such as, but not limited to, occupational or vocational education courses and schools, industrial schools, and trade schools.

(C) Motor vehicle manufacturer-conducted seminars, training courses, and schools;

(D) Other such sources as shall seek and obtain Commission accreditation; or

(ii) Mechanical ability and attainment of a level of skills and proficiencies in conducting emissions inspections satisfactory to the Division. Such attainments shall include demonstrated knowledge and skills in the functioning, proper use, care, and maintenance, including the checking for and performing calibration, of the approved exhaust analyzers and related equipment; or

(iii) Furnishing to the Division other evidence that he possesses the necessary skills to perform the emissions inspection. Other evidence may include, but shall not be limited to, certificates or licenses issued by another state or political subdivision to perform such inspections. The Division shall be required to obtain the concurrence of the Commission or its designees in accepting any such certificate or license as evidence of competence. Any applicant relying upon such other evidence may be required to provide such documentary evidence as to the extent of testing, mechanical skills, and competence, and certified or authenticated copies of official and other records evidencing the passing of tests and attainment of such skills and competence.

c. The emissions inspector shall be required to properly conduct the motor vehicle emissions inspection and be capable of evaluating and interpreting the emissions inspection results on all motor vehicles required to be so inspected, in accordance with the Colorado idle emissions inspection test procedure provided in regulations of the Department of Revenue. Said inspection shall consist of a measurement of motor vehicle exhaust emissions for hydrocarbon (HC) and carbon monoxide (CO) at engine idle mode, using a Division-approved exhaust analyzer and related equipment.

d. An applicant must pass such qualification tests, written and performance, as developed and approved by the Division. Such testing shall require demonstration of an understanding of the ability to perform basic maintenance procedures on air pollution control systems installed by manufacturers and the current practices used in performing the emissions inspection.

e. The Division shall issue a certificate of qualification to an applicant upon the successful completion of the requirements of this Section B. 1.

2. Requalification Requirements for Emissions Inspectors

a. Upon the determination by the Commission of the necessity of updating the qualifications for emissions inspectors and, upon development or approval of retraining courses and retesting requirements for emissions inspectors to demonstrate said qualification, emissions inspectors, or holders of certificates of qualification, shall be required to requalify. In order to maintain their status as licensed emissions inspectors, or to update their certificate of qualifications, said retraining shall be required.

b. Emissions inspectors shall be required to requalify within one (1) year from the date of written notification by the Division. Said notice shall be mailed to the address of record in the office of the Department of Revenue charged with licensing of emissions inspectors, which notice shall inform the person of the necessity of requalification and the nature of such skills systems, and procedures requiring the retraining for the continued performance of the emissions inspection. The notice shall give the name and location of training sources approved or accredited for purposes of retaining, the necessity of requalification by a date certain, and the nature and evidence of documentation to be filed with the Division evidencing such requalification, and state that failure to requalify within said period of time shall result in an automatic suspension or revocation of the emissions inspector's license or certification.

c. Opportunity for review before the Commission or its designees pursuant to the procedural rules of the Commission shall be afforded upon such suspension or revocation.

d. Upon notice of such suspension or revocation, the licensed emissions inspector or the non-licensed holder of a certificate of qualification shall surrender such license or certificate forthwith to the Department of Revenue. Thereafter, no further emissions inspections shall be performed by the previously licensed emissions inspector.

e. The Division shall issue a certificate of requalification to any person who has requalified to the satisfaction of the Division.

3. Transmittal of Certificates and Issuance of Emissions Inspector Licenses

   The Division shall provide a duplicate copy of any certificate of qualifications or certificate of requalification to the emissions inspector authority of the Department of Revenue, and, upon application by any person so certified or re-certified, the Department of Revenue shall issue an emissions inspector's license in accord with the regulations of that department.

4. Lapse of Certificate of Qualification for Emissions Inspectors

   A person to whom the Division has issued a certificate of qualification, or certificate of requalification, who has not been issued an emissions inspector's license within six (6) months from the date of issuance of the most recently issued certificate shall be deemed to have forfeited the said certificate and shall be required to re-apply if a new certificate of qualification is requested.

C. Procedures and Practices to Ensure the Proper Performance of an Emissions Inspection

An emissions inspector shall perform an emissions inspection only under the following conditions and circumstances:

1. Ambient Air Conditions - The ambient air temperature in the emissions inspection lane shall be maintained between 35°F (2°C) and 110°F (43°C) during inspection within a structure or facility which shall be protected from outside elements and within which no mechanical building operations or systems shall interfere with the maintenance of other emissions inspection factors herein required.

2. Temperature - The vehicle shall be brought within a normal operating temperature range.

3. Exhaust Analyzer - Exhaust analyzers used to perform the emissions inspection shall have been inspected by the Department of Revenue and found to comply with the criteria set forth in Section A of this regulation.

4. Calibration and Sample Probe Use - The exhaust analyzer shall be calibrated as specified in instrument manufacturer's instruction manual. The sample probe shall then be connected to the exhaust system. In case of a dual exhaust system, the sample probe shall be connected to the left side exhaust pipe.

5. Sample Readings - With the engine idling and the transmission in neutral gear or "park", the HC-CO readings shall be obtained and recorded on the inspection form. Vehicles that have passed HC-CO readings at or below the maximum limits for that model-year vehicle shall be issued a certificate of emissions compliance. Those vehicles which exceed said emissions standards shall be issued a certificate of emissions denial.